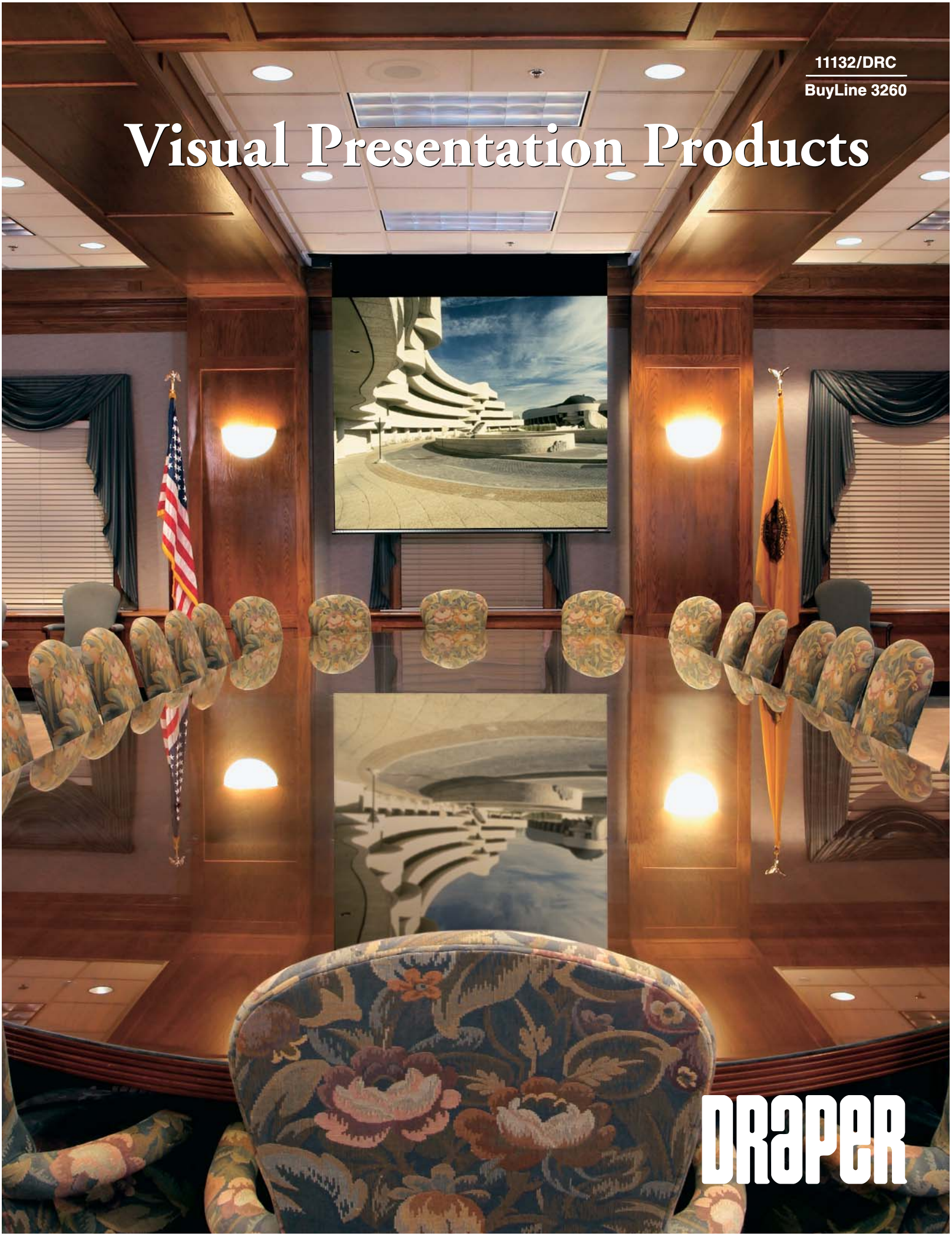
11132/DRC

BuyLine 3260

Visual Presentation Products



DRAPER

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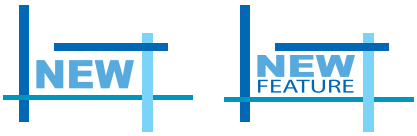
Draper has a 102-year tradition of product innovation. Watch for the logos at right to discover new products and features.



Draper also manufactures related products, including lifts and mounts for projectors and plasma displays (11457, also pages 27-41 of this catalog), FlexShade window coverings (12492) and gymnasium equipment (11480). Please call for catalogs on any of these product lines, or visit our web site at www.draperinc.com.

Warranty—*All products in this catalog are warranted for one year against defects in materials and workmanship. Some products carry a longer warranty term: see product description. Defective products will be repaired or replaced at Draper's option. Authorization required prior to return. Detailed warranty terms are available upon request.*

Projection Screen Models and Surfaces

Screen Model	Fiberglass Matt White and Glass Beaded	M1300/M2500 or Hi Def Grey	High Contrast Grey	Panamax	AT1200 or AT Grey	Cineflex
Access/Series E	✘		✘	✘	✘	
Access/Series M	✘		✘			
Access/Series V		✘				✘
Ambassador	✘		✘			
Apex	✘		✘			
Artisan/Series E	✘		✘		✘	
Artisan/Series M	✘		✘			
Artisan/Series V		✘				
Cineperm		✘			✘	✘
Clarion	✘	✘			✘	
Envoy		✘	✘	✘	✘	
Luma & Luma 2	✘		✘			
Onyx		✘			✘	✘
Paragon	✘					
Premier		✘				✘
Premier/Series C		✘				✘
Rolleramic	✘		✘	✘		
Salara	✘		✘		✘	
ShadowBox Clarion		✘				✘
Signature/Series E	✘		✘	✘	✘	
Signature/Series V		✘				✘
Silhouette/Series C		✘				✘
Silhouette/Series E	✘		✘		✘	
Silhouette/Series M	✘		✘			
Silhouette/Series V		✘				✘
Targa	✘		✘	✘	✘	
Ultimate Access/Series E	✘		✘	✘	✘	
Ultimate Access/Series V		✘				✘
WrapAround Clarion		✘				

Some Draper projection surfaces are not available in all standard sizes.

Draper Projection Screen Surfaces

Draper offers two types of front projection screen surfaces—textile backed and 100% vinyl.

Textile Backed Screen Surfaces—*A reflective surface laminated to a woven textile base. The screen surface hangs suitably flat because of the stability of the material and the weight of the bottom dowel. Good for all types of projection. Commonly used for single lens video projection, as well as for CRT video and data-graphics projection.*

Fiberglass Matt White—The standard to which all other screen surfaces are compared. Matt white vinyl reflective surface laminated to tear-resistant woven fiberglass. A matt white surface diffuses projected light in all directions, so image can be seen from any angle. Provides accurate color rendition as well as superior clarity. Recommended for use with all high light output projection devices. Requires control of ambient light in the audience area. Washable, flame and mildew resistant. Seamless in all standard sizes through 10′ high.

Panamax—Seamless matt white material for large roller operated screens—up to 16′ wide. Panamax has excellent dimensional stability. Washable. Most motorized screens with Panamax are not UL listed: refer to specifications for details.

Glass Beaded—Brighter on-axis viewing than matt white surfaces within a narrower viewing cone. Some loss of clarity. Not for use with ceiling- or floor-mounted projectors. Flame, mildew resistant, but cannot be cleaned. Seamless in all standard sizes through 10′ high.

High Contrast Grey—Grey textile-backed surface offers excellent resolution while enhancing the blacks of LCD and DLP projected images, even as whites and lighter colors are maintained. Performs well in ambient light. Lower gain of 0.8 allows use with even the brightest projectors. Available on most non-tensioned motorized and manual screens; seamless in sizes up to 8′ in height.

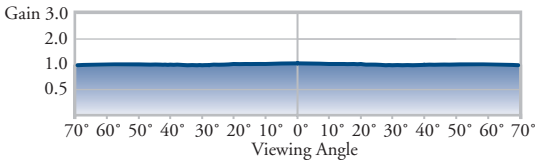
NEW

AT1200 and AT Grey—The most innovative and versatile acoustically transparent screen material. Similar in gain performance to matt white. Acoustical properties comparable to the finest speaker grille cloth. Washable, flame and mildew resistant. Available in sizes through 72″ x 96″ or 10′ diagonal. AT1200 is white; AT Grey is grey for high contrast.

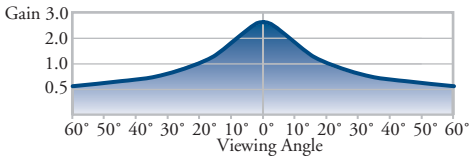
NEW

Gain Charts*

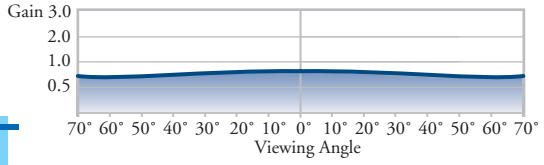
Fiberglass Matt White, Panamax, AT1200 & AT Grey



Glass Beaded



High Contrast Grey



100% Vinyl Materials—*These screen surfaces are tensioned vinyl with no backing. Draper offers motorized, crank-operated and permanently tensioned screens with built-in tensioning systems. Advantage—The surface is stretched perfectly flat, resulting in better picture quality. Flatness is always desirable and highly recommended for video or data-graphics projection.*

M1300—The perfect matt white diffusing surface. Extremely broad light dispersion and spectral uniformity. Panoramic viewing angle and true color rendition. Recommended for use with any type of projector in rooms where the light level can be reasonably controlled. Washable.

M2500—A high-contrast front viewing surface with excellent resolution and high gain. For data-graphics projectors producing up to 1000 ANSI lumens. M2500 tolerates a higher ambient light level than most other front projection screen surfaces.

HiDef Grey—A grey front projection surface that provides excellent contrast and black reproduction with a low gain to handle today's super-bright projectors. The grey color enhances color contrast, black levels and allows for more ambient light in the audience area.

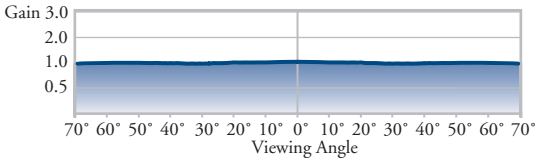
Cineflex—A neutral grey vinyl for rear projection. Cineflex has high resolution and excellent contrast, even in lighted rooms. For use with any type of projection equipment.

When selecting a front projection surface, several key factors need to be considered, including:

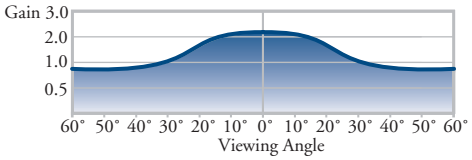
- *Gain*—a relative measure of a screen's reflectivity.
- *Contrast*—the ability to accurately reproduce and differentiate light and dark characters and backgrounds, or light and dark areas of an image.
- *Ambient light rejection properties*—the ability to perform well under normal to adverse audience lighting conditions.
- *Resolution*—the clarity of the projected image.
- *Uniformity*—the screen's performance when viewed from various points off the projection axis (both horizontally and vertically), and when the brightness of the center of the image is compared to the corners.
- *Aspect ratio*—the screen's height and width configuration, formatted for the desired projection source (NTSC video, HDTV, WideScreen, CinemaScope, overhead, slide or motion pictures).

The quality of image which the human eye perceives is primarily a function of gain, contrast, uniformity and resolution.

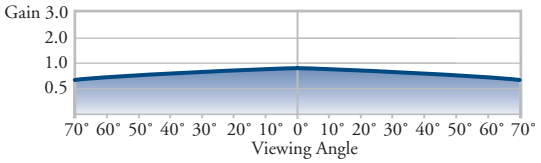
M1300



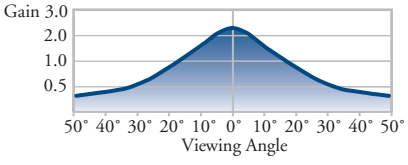
M2500



HiDef Grey



Cineflex



**These charts depict gain values at various points, measured in degrees from projection axis. Gain is a measure of brightness as compared to a block of magnesium carbonate, which serves as a standard for gain of 1.0. These charts also help in judging uniformity. The flatter the curve in the portion of the viewing cone where viewers will be seated, the more consistent the image they will perceive.*

Selecting the Right Screen

Draper manufactures the finest and most complete line of projection screens in the world. We want to help you incorporate these screens into the most effective presentation systems. Planning a projection system involves several steps: choosing the screen size, viewing surface, screen model and control system, if required. We've provided detailed recommendations to help with these important decisions.

Projection Screen Size Selection

One of the most important decisions in screen selection is to determine the correct size of screen based upon—

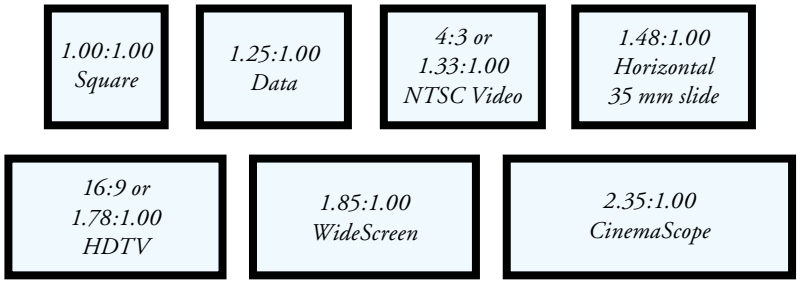
1. The dimensions of the audience area.
2. The projection format, or formats, to be used.

Other key considerations—

- **Audience Area**—The goal is to make the screen large enough so those in the back row can read the subject matter easily, but not so large as to overwhelm the closest viewer.
- **Height**—Use the following formulas for calculating screen height for maximum legibility. For 4:3 NTSC moving video and entertainment, screen height should be at least ⅙ the distance from the screen to the furthest seat; for charts and data, as in a conference or lecture room, use ¼; for complex graphics found in command/control center, use ½. For HDTV projection, screen height should equal or exceed ⅓ the distance from the screen to the optimum seat.
- **Width**—Screen width is generally determined by the height of the screen and the projection formats to be used.
- **Ceiling Height**—The bottom of the screen should be approximately 40-48″ above the floor in a room with a level floor and several rows of seats. In rooms with theatre seating or only one or two rows, the bottom of the screen should usually be 24-36″ above the floor. Evaluate any barriers, and try to make sure that the lower part of the screen will be visible from all seats. Extra drop may be required to position the screen at a comfortable viewing level in a room with a high ceiling.
- **Projection Format**—Once you have determined the correct size of screen based upon the audience area, that size may be modified based upon the projection equipment. If the screen will only be used with one type of projector (NTSC video, HDTV, etc.), it is easy to determine the exact screen dimensions based upon its projection format.

Common Projection Formats (H:W)

Note: Vertical presentation of a slide reverses its aspect ratio. To allow this, use a 1.00:1.00 aspect ratio for any type slide.



Most models of Draper screens are offered in both audio visual and 4:3 NTSC video formats. Many models are also offered in HDTV and WideScreen formats. The differences between these formats are described below. We are glad to provide any Draper screen in the size and projection format of your choice, up to and including the largest published size.

Audio visual (or AV) format screens accommodate a variety of projector types and range from square to wide horizontal in aspect ratio. **AV format screens** are described in terms of height x width, and are standardly furnished without black borders, although borders are optionally available. Screens with Tab Tensioning System always include black borders.

NTSC video format screens, on the other hand, are specifically designed for use with video/data projectors. Their format is strictly defined as a 4:3 rectangle, and the size is usually described in terms of a nominal diagonal. Conventional models of NTSC format screens are standardly furnished with black borders to frame the image on all four sides. Tab Tensioned screens are standardly furnished with black borders at the sides and bottom. 12″ black drop at the top of the screen is now standard on Tab Tensioned screens. **HDTV format** (16:9) is designed for high-definition television projection, and **WideScreen format** (1.85:1) is suitable for letterboxed video images. Data graphics format (5:4) projectors more accurately reproduce the image from a 1024 x 1280 pixel computer screen. Data graphics format screens are available in any model by quotation.

How to Calculate a Custom Size

Draper also manufactures custom size screens to meet your specification. Virtually any size up to the maximum shown for a given model is available. If you need to calculate a custom size, these formulas may be useful (D = exact diagonal; H = viewing area height; W = viewing area width):

4:3 NTSC Video	*16:9 HDTV*	*1.85:1 WideScreen*	*2.35:1 CinemaScope*	*5:4 Data Graphics*
H = D x .6	H = D x .49	H = D x .4762	H = D x .3915	H = D x .625
W = D x .8	W = D x .87146	W = D x .881	W = D x .92	W = D x .781
D = H x 1.667	D = H x 2.04	D = H x 2.1	D = H x 2.554	D = H x 1.601
D = W x 1.25	D = W x 1.1475	D = W x 1.135	D = W x 1.0868	D = W x 1.281

Front Projection Screens

Screen Models	Motor-in-Roller	Tensioning System	Ceiling Closure	Custom Wood Cases	Sizes Over 12′ Wide
Ceiling–Recessed					
Access Dual Roller FlexShade	✻				
Access/Series E	✻				
Access/Series M	1				
Access/Series V	✻	✻			
Ambassador			✻		
Apex	1		✻		
Envoy	✻		✻		
Paragon	✻				✻
Rolleramic					✻
Signature/Series E	✻		✻		✻
Signature/Series V	✻	✻	✻		✻
Ultimate Access/Series E	✻		✻		
Ultimate Access/Series V	✻	✻	✻		
Wall–Mounted					
Artisan/Series E	✻			✻	
Artisan/Series M	1			✻	
Artisan/Series V	✻	✻		✻	
Cineperm		✻			✻
Clarion		✻			✻
Luma & Luma 2	1				
Onyx		✻			✻
Premier	✻	✻			
Premier/Series C	2	✻			
Salara	✻				
Silhouette/Series C	2	✻			
Silhouette/Series E	✻				
Silhouette/Series M	1				
Silhouette/Series V	✻	✻			
Targa	✻				

1. Spring-roller operated. *2. Crank-operated.*

Motorized Screen Controls

Single Station Control ❶

❶

Standard with most Draper electrically operated screens. Three-position rocker switch accepts 115v current. Switch operation is sustained contact. Complete with single-gang cover plate.

115 Volt Multiple Station Controls ❶

Identical in appearance to Single Station Control, see above. Automatic override allows only one signal to reach the motor when switches are operated simultaneously.

**Low Voltage Controls* ❷ & ❸

❸

❷

The most versatile control for your electric screens. Order the Low Voltage Control unit without switches as an interface for a sophisticated master control system. Three-button switches and remote controls are also available, as shown. Switches have neutral decorator face plates for flush wall mounting. The Low Voltage Control unit is also equipped with jacks for easy connection to Draper RF and IR receivers (see below). Wiring from control unit to switches or receivers is lightweight for 24 volt current. Optional for all Draper motorized screens, except Access Sonata.

**Radio Frequency Remote Control* ❷ & ❹

❹

Hand-held transmitter. 3-button control lets you raise or lower screen or adjust format at any point. Receiver plugs into the Draper Low Voltage Control unit (required, see above).

**Infrared Remote Control* ❷ & ❺

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❺

Infrared transmitter and receiver. 3-button operation for instant access to "up", "down" and "stop" functions. Fully compatible with "learnable" IR master control systems. Receiver plugs into the Draper Low Voltage Control unit (required, see No. 2).

Key Operated Power Supply Switch

Useful with any control system for a Draper electrically operated projection screen—low voltage or 115v. Switch mounts next to operating switch and controls power to it.

Locking Switch Cover Plate

3-position control switch for limited access. Cover plate and locking switch cover are brushed stainless steel. Two keys furnished. 115v only.

Key Operated 3-Position Switch

Similar to Draper's standard 3-position control switch but requires a key for operation. 115v and low voltage style available. When used alone, a maintained contact switch is provided. With Low Voltage Control ❷, a momentary contact switch is provided; then, the low voltage control functions as a latching relay, so the screen will operate all the way up or down when the switch is activated. Two keys furnished.

Individual/Group Control for more than one screen per room

The IGC-3N1 is a specialized low voltage control system designed for rooms with two or more motorized screens. Depending on the switches and remote transmitters that are ordered with the control, it is possible to operate screens in tandem, separately or both.

**Video Interface Control*

Allows screen to be controlled by projector switch. When the projector comes on, the screen descends automatically. Model VIC115 integrates screen operation with equipment with a 115v switched outlet. Models VIC12 & VIC6 interface screen operation with equipment featuring a 12v switched outlet. The VIC115, VIC12 & VIC6 may be purchased with an override switch (VIC–OS), permitting independent operation. ***A VIC is not compatible with an LVC-III, built-in or otherwise.***

**These optional controls may be factory-installed into the case of Access, Ultimate Access and Silhouette screens at no extra charge. Built-in controls may increase length of case, except for the Ultimate Access Series. Choose either an LVC-III with or without a wireless transmitter, or choose a VIC. LVC-III and VIC are not compatible on a single motor, built-in or otherwise. Both may be used in an Access MultiView, which has two independently controlled motors.*

Access Concept

• *Access/Series V, Series E & Series M*

• *Ultimate Access/Series V & Series E*

The Access Series is the most versatile ceiling-recessed screen on the market. Job site damage can be avoided, and tough decisions regarding screen size, aspect ratio and viewing surface can be deferred until the appropriate time by using this innovative screen solution.

Case Now/Screen Later—The essence of the Access concept is a unique ceiling-recessed, extruded aluminum headbox. The screen itself—viewing surface attached to roller—can either be furnished with the headbox or at any time thereafter. The screen installs in minutes with only a hex key.

The 10 models which comprise the Access Series are described here and on pages 7-9.

What If...

What if you know you want a ceiling-recessed screen, but you don't know what projector (or projectors) will be used. Therefore, you don't know the optimum size or aspect ratio of the screen, the optimum screen surface or whether tab tensioning is required.

✔ *No problem with the Access—Order the case now. Just make sure it's large enough to accept the largest screen you think you may need. Order the screen later, after the projector decision is made. Or let the occupant make the decision at a later date.*

What if technology changes? What if a new projection format is introduced or Draper introduces a superior new screen surface?

✔ *No problem with the Access—It's quick, easy and comparatively inexpensive to replace the screen in an Access with no extra electrical or ceiling work.*

What if you're planning a facility and the room design is flexible, or the presentation rooms have not yet been determined?

✔ *No problem with the Access—Install an Access case in each room during construction and think about screen selection later. Adds great value to the facility.*

Access Case

Access Case

Easy Installation—Easy Access

It's easy to see why the Access Series is so popular. Designed with solutions in mind, the case features include:

- Hanging brackets slide in channels on top of the case, allowing unlimited adjustment to avoid interference with conflicting building structures. ❶
- A pre-wired junction box inside (left end standard), and cable exit holes on top.
- "Pin connector" electrical connection of screen to junction box eliminates tools.
- Flange supports ceiling tile or trims the opening of any type of ceiling. ❷
- Bottom of case forms a slot for fabric passage ❸ and is removable without tools ❹ for installation or replacement of screen.

The screen (viewing surface attached to roller) comes with easy-to-install roller brackets. These slide along a track inside the top of the case and may be locked in place at any point so the case can accommodate different sizes of screens. Since both brackets are movable, the screen can always be centered in the case—regardless of case size. A large case allows for nearly unlimited flexibility.

The Access case may be ordered in advance of the screen or alone. The installation of a ceiling-recessed projection screen in the aftermarket may cost more than the screen itself, so a pre-installed ceiling-recessed housing adds real value. You can select, order and install the desired Access Series screen at any later date.

Ultimate Access Case

One step further—The Ultimate Access

The Ultimate Access case offers all the advantages of the Access, plus an independently motorized "trap door" ceiling closure. The Ultimate Access' door opens up into the case. It never dangles behind the viewing surface and when closed, it is perfectly flat without adjustment.

At right, the Ultimate Access case is shown with the ceiling closure closed ❺, then open inside the case ❻.

Finally, the entire closure extends down as required for screen installation or adjustment ❼.

Need to install a projection screen in front of a window? Contact Draper!

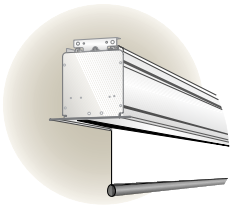
Draper has a new approach to the problem of projection screens in front of window openings. With the Access Dual Roller FlexShade, you can have a motorized window shade that covers and seals the window light, plus a projection screen with your choice of format and viewing surface, in the same recessed Access headbox.

Access Series

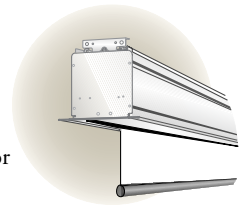
Eliminates your installation problems
Install the case now and the screen later

The Access is the most versatile ceiling-recessed screen on the market. No other projection screen offers you the benefits of installing the case during construction and quick connecting the viewing surface at a later date to eliminate job site damage. See page 6 for details about Draper's Access case.

***Access/Series V*—**Motorized screen features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.



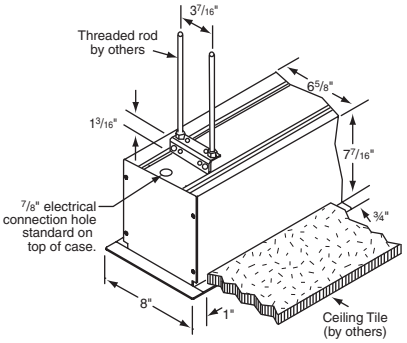
***Access/Series E*—**Motorized screen in your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey, Panamax or acoustically transparent AT1200 or AT Grey.



***Access/Series M*—**Manual, spring-roller operated screen in your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

System Options

- ***Extra Drop***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop is optional, either white or black (black is standard for Series V. White is standard for Series E and M in AV format; black in other formats). Extra drop will increase the overall length of the case of a Series V.
- ***Black Masking Borders***—Borders are optional for Series E and M in AV format. Borders are standard for Series E and M in all other formats and for all Series V screens.
- ***Control Options***—For motorized controls, refer to page 5. Controls may be built into case and will increase the overall length of case. For Series M, aluminum operating pole is available in place of factory attached pull cord. Choice of two sizes: 4′ and 6′.
- ***Screen/Case Options***—You may choose left or right motor location.



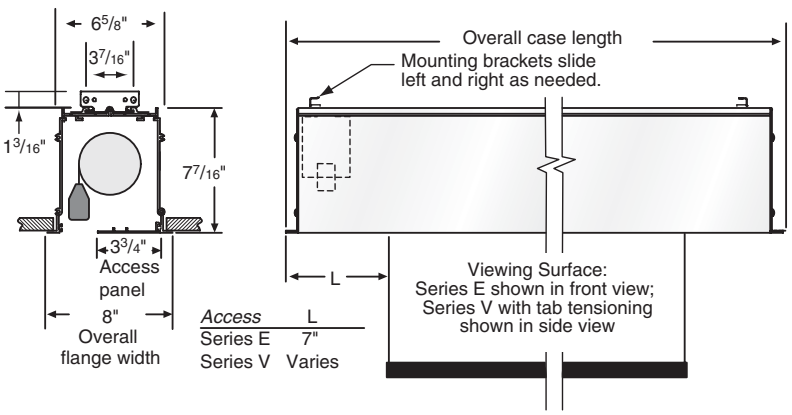
Lecture Hall, Christopher Center for Learning and Leadership, Concordia University, River Forest, IL. Installation by Sound Vision, Elgin, IL. U.S. Patent Nos. 6,137,629; 6,421,175 and 6,532,109; other patents pending.

Dimensions & Data—Access Series

AV Format		*Series E*		*Series M*		*Series V*	
	HxW	Case Length*	Net Wt.(lbs.)	Case Length	Net Wt.(lbs.)	Case Length*	Net Wt.(lbs.)
	50″ x 50″	5′4″	50	4′8″	33	6′3″	58
	60″ x 60″	6′2″	55	5′6″	39	7′2″	66
	70″ x 70″	7′	65	6′4″	45	8′	69
	84″ x 84″	8′2″	72	7′6″	51	9′3¼″	74
	72″ x 96″	9′2″	80	8′6″	53	10′2″	92
	96″ x 96″	9′2″	90	8′6″	56	10′4¾″	92
	7′ x 9′	10′2″	92	9′6″	57	11′3¼″	95
	9′ x 9′	10′2″	93	9′6″	65	11′4¾″	95
	8′ x 10′	11′2″	97	10′6″	72	12′4¾″	99
	10′ x 10′	11′2″	107	10′6″	77	12′6½″	109
	9′ x 12′	13′2″	108	12′6″	88	14′4¾″	110
	12′ x 12′	13′2″	119	12′6″	104	14′10½″	121

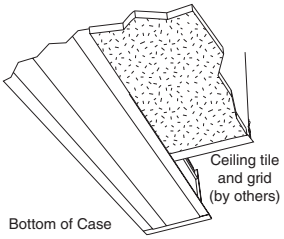
NTSC Video Format		*Series E*		*Series M*			*Series V*	
Nominal Diagonal	Viewing Area	Case Length*	Net Wt.(lbs.)	Case Length	Net Wt.(lbs.)	Viewing Area	Case Length*	Net Wt.(lbs.)
6′	42½″ x 56½″	6′2″	55	5′6″	36	42½″ x 56½″	6′9½″	60
7′	50″ x 66½″	7′	61	6′4″	43	50″ x 66½″	7′7½″	68
100″	60″ x 80″	8′2″	71	7′6″	50	60″ x 80″	8′9″	73
10′	69″ x 92″	9′2″	82	8′6″	53	72″ x 96″	10′2″	92
11′	78″ x 104″	10′2″	96	9′6″	60	78″ x 104″	10′11¼″	98
150″	87″ x 116″	11′2″	102	10′6″	72	87″ x 116″	11′11¼″	104
15′	105″ x 140″	13′2″	108	12′6″	88	108″ x 144″	14′4¾″	110

*Optional built-in controls increase length of case. In Series V, extra drop also increases case length. Case lengths shown include flanges to support ceiling tile.



Ultimate Access

With an independently motorized ceiling closure



The Ultimate Access offers all the advantages of the Access, *plus an independently motorized ceiling closure*. In its closed position, the motorized closure forms a solid bottom panel giving the ceiling a clean appearance. At the touch of a switch or wireless transmitter, the door of the Ultimate Access opens *into* the case before the viewing surface descends into the room. Your audience will be impressed by its precision timing and quiet, fluid movement.

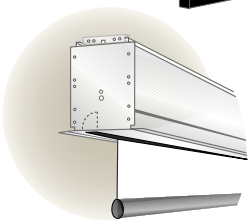
No other projection screen offers you so many benefits. Refer to page 6 for the rewards of installing the Ultimate Access case during the "dirty" phase of the construction process. The screen (motor-in-roller with attached viewing surface) can be ordered, shipped and stored independently of the headbox, and popped into the case at a future date. Eliminates job site damage.

Ultimate Access—*The ultimate in projection screen design.*

C.A.P.E. Facility—IMMI, Westfield, IN. Dealer/Installer: Data Projections, Inc. U.S. Patent Nos. 5,341,241, 6,137,629, 6,421,175 and 6,532,109. Other patents pending.

***Ultimate Access/Series V*—**Features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.

Ultimate Access/Series E—
Your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey, Panamax or acoustically transparent AT1200 or AT Grey.



System Options

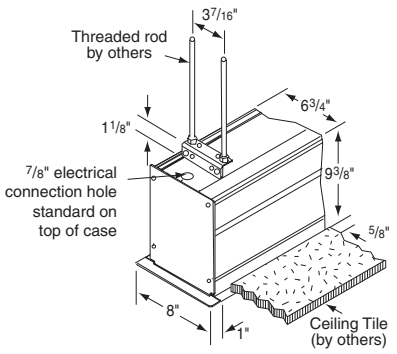
- ***Extra Drop***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional, either white or black (black is standard for Series V. White is standard for Series E and M in AV format; black in other formats). Extra drop will increase the overall length of the case of a Series V.
- ***Black Masking Borders***—Borders are optional for Series E in AV format. Borders are standard for Series E in all other formats and for all Series V screens.
- ***Control Options***—Refer to page 5. Controls may be built into case and will increase the overall length of the case.
- ***Screen/Case Options***—Left end motor location only.

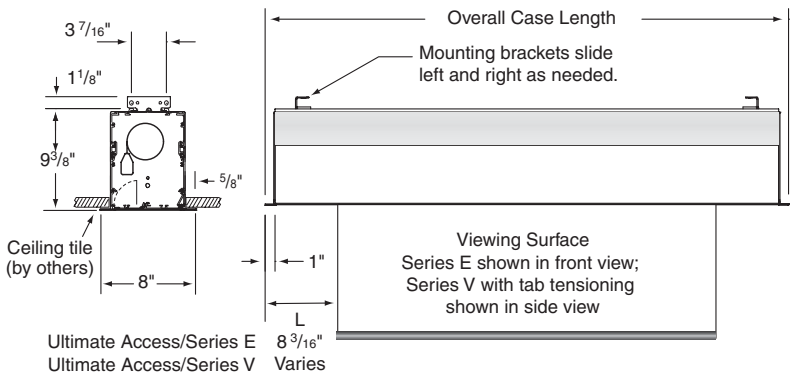
Dimensions & Data—Ultimate Access Series

AV Format H x W	*Series E* Case Length	Net Wt. (lbs.)	*Series V* Case Length*	Net Wt. (lbs.)
50″ x 50″	5′6⅜″	82	6′3⅞″	84
60″ x 60″	6′4⅜″	93	7′2⅞″	96
70″ x 70″	7′2⅜″	98	8′⅞″	100
84″ x 84″	8′4⅜″	105	9′4⅛″	108
72″ x 96″	9′4⅜″	121	10′2⅞″	134
96″ x 96″	9′4⅜″	127	10′5⅝″	135
7′ x 9′	10′4⅜″	134	11′4⅛″	138
9′ x 9′	10′4⅜″	135	11′5⅝″	139
8′ x 10′	11′4⅜″	141	12′5⅝″	144
10′ x 10′	11′4⅜″	155	12′7⅜″	158
9′ x 12′	13′4⅜″	157	14′5⅝″	160
12′ x 12′	13′4⅜″	173	14′11⅜″	176

NTSC Video Format Nominal Diagonal	Viewing Area	*Series E* Case Length	Net Wt. (lbs.)	*Series V* Viewing Area	Case Length*	Net Wt. (lbs.)
6′	42½″ x 56½″	6′4⅜″	85	42½″ x 56½″	6′10⅜″	87
7′	50″ x 66½″	7′2⅜″	96	50″ x 66½″	7′8⅜″	99
100″	60″ x 80″	8′4⅜″	103	60″ x 80″	8′10⅞″	106
10′	69″ x 92″	9′4⅜″	121	72″ x 96″	10′2⅞″	134
11′	78″ x 104″	10′4⅜″	136	78″ x 104″	11′⅛″	140
150″	87″ x 116″	11′4⅜″	138	87″ x 116″	12′⅛″	142
15′	105″ x 140″	13′4⅜″	157	108″ x 144″	14′5⅝″	160

*Extra drop on Series V may increase case length. Specify when ordering, and contact Draper if this dimension is critical. Case lengths include flanges to support ceiling tile.





Specifications—Ultimate Access

_____Projection screens, size_____h. x_____w., for recessed ceiling mounting. Electrically operated 110-120v. ac, 60 Hz. 5-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with internal thermal overload protector, electric brake. Motor mounted with sound absorbing fixtures. Preset, accessible limit switches.

Case finished white. Back, top, front, and bottom of extruded aluminum. Endcaps are stamped steel. Bottom of case consists of an independently motorized trap door that opens up inside the screen case. The trap door and the access door both hinge downward to allow access to inside of screen case. The doors remain attached to the screen case via a concealed full-length hinge. Releasing one latch at each end of screen case allows the doors to hinge downward and a prop arm at each end may be pivoted to engage with endcaps, keeping the door assembly in its fully open position. Symmetrical case allows for viewing surface to unroll from the back or front of the roller. Internal junction box allows case to be installed and pre-wired to building supply. Junction box to have two plug-in style connectors, mating with connectors from motorized roller/fabric assembly and motorized door assembly. Case flange to trim edges of ceiling opening. Case may be mounted with ⅜″ threaded rod at ends or along length, with lag screws through brackets, or with wire in a grid ceiling. Mounting brackets slide in channels on top of case, allowing brackets to be moved somewhat to avoid interference with conflicting building structures. Brackets lock in position by tightening set screws.

Roller/fabric assembly may be installed in case at factory or job site. Brackets supporting roller/fabric assembly to slide in track inside top of case, allowing viewing surface to be centered in case regardless of screen size. Roller of 3″ dia. metal.

Ultimate Access/Series V: Viewing surface of (M1300/M2500/HiDef Grey/optional Cineflex), with black masking borders. Each side of surface to have tab-guide cable system for even lateral tension and flat surface. Bottom of surface supported and masked by black extruded aluminum dowel weighted to apply proper vertical tension. Top of surface masked by 12″ black drop. Viewing surface flame and mildew resistant.

Ultimate Access/Series E: Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey/optional AT1200/optional AT Grey/optional Panamax). Viewing surface flame and mildew resistant. Bottom of viewing surface enclosed in dowel. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

3-position control switch (or switches-specify number) to stop or reverse screen at any point. Switch(es) furnished with cover plate. Entire unit certified by Underwriters' Laboratories, Inc. for U.S. and Canada. Patented by Draper, Inc. (U.S. Patent Nos. 5,341,241, 6,137,629, 6,421,175 and 6,532,109), other patents pending.

Specifications—Ultimate Access Case Only

____Projection screen cases, size ____ w., to be recessed in ceiling. Case finished white. Back, top, front, and bottom of extruded aluminum. Endcaps are stamped steel. Bottom of case consists of an independently motorized trap door that opens up inside the screen case. Trap door and access door both hinge downward to allow access to inside of screen case. The doors remain attached to screen case via a concealed full-length hinge. Releasing one latch at each end of screen case allows doors to hinge downward and a prop arm at each end may be pivoted to engage with endcaps, keeping the door assembly in its fully open position. Symmetrical case allows for viewing surface to unroll from back or front of the roller. Internal junction box allows case to be installed and pre-wired to building supply. Junction box to have two plug-in style connectors, mating with connectors from motorized roller/fabric assembly and motorized door assembly. Case flange to trim edges of ceiling opening. Case may be mounted with ⅜″ threaded rod at ends or along length, with lag screws through brackets, or with wire in a grid ceiling. Mounting brackets slide in channels on top of case, allowing brackets to be moved somewhat to avoid interference with conflicting building structures. Brackets lock in position by tightening set screws.

Roller/fabric assembly may be purchased from Draper, Inc. and installed in the case at job site. Brackets supporting roller/fabric assembly to slide in a track inside top of case, allowing viewing surface to be centered in case regardless of screen size. Patented by Draper, Inc. (U.S. Patent Nos. 5,341,241, 6,137,629, 6,421,175 and 6,532,109; other patents pending.) Certified by Underwriters' Laboratories for the U. S. and Canada.

Specifications—Access

11132/DRC

BuyLine 3260

_____Projection screens, size_____h. x_____w., for recessed ceiling mounting. Case finished white. Back, top and front of extruded aluminum. Endcaps are stamped steel. Bottom panel forms slot for passage of viewing surface, easily removable for access. Symmetrical housing to allow for left- or right-hand motor location and for viewing surface to unroll from back or front of roller. Housing to include bottom flange for trim around edges of ceiling opening. Case may be mounted with ⅜″ threaded rod at ends or along length, with lag screws through brackets, or with wire in a grid ceiling. Mounting brackets slide in channels on top of case, allowing brackets to be moved to avoid interference with conflicting building structures. Brackets lock in position by tightening set screws.

Roller/fabric assembly may be installed in case at factory or job site. Brackets supporting roller/fabric assembly to slide in a track inside the top of the case, allowing viewing surface to be centered in case regardless of screen size. Roller of 3″ dia. metal.

Access/Series V: Viewing surface of (M1300/M2500/HiDef Grey/optional Cineflex), with black masking borders. Each side of surface to have tab-guide cable system for even lateral tension and flat surface. Bottom of surface supported and masked by black extruded aluminum dowel weighted to apply proper vertical tension. Top of viewing surface masked by 12″ black drop. Viewing surface flame and mildew resistant.

Access/Series E: Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey/optional AT1200/optional AT Grey/optional Panamax). Note: Matt white and glass beaded surfaces up to 10′ high will be seamless. Bottom of viewing surface enclosed in dowel.

Electrically operated 110-120v ac, 60 Hz. 3-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with thermal overload protector and electric brake. Preset, accessible limit switches. Housing to feature internal junction box, allowing it to be installed and wired to building supply wires at an early stage of construction. Junction box to have plug-in style connector, accepting the mating half of the connector from the motorized roller/fabric assembly. 3-position control switch (or switches-specify number) to stop or reverse screen at any point. Switch(es) furnished with cover plate.

Entire unit certified by Underwriters' Laboratories for the U.S. and Canada. Patented by Draper, Inc. (U.S. Patent No. 6,137,629, 6,421,175 and 6,532,109), other patents pending.

Access/Series M: Viewing surface (fiberglass matt white/glass beaded/optional High Contrast Grey), flame and mildew resistant. Bottom of viewing surface enclosed in dowel. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless. One piece rigid steel roller with heavy-duty spring. Patented by Draper, Inc. (U.S. Patent No. 6,532,109), other patents pending.

Specifications—Access Case Only

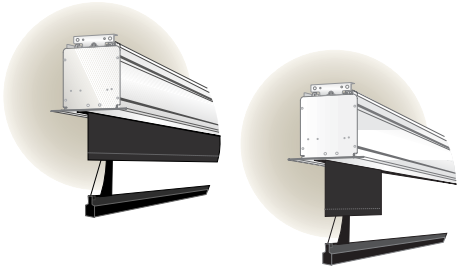
____ Projection screen cases, size ____ w., to be recessed in ceiling. Case finished white. Back, top, and front of extruded aluminum. Endcaps of stamped steel. Bottom panels form slot for passage of viewing surface, easily removable for access. Symmetrical case to allow for left or right-hand motor location (if motorized), and for viewing surface to unroll from the back or front of the roller. Case to include bottom flange for trim around edges of ceiling opening. Case may be mounted with ⅜″ threaded rod at ends or along length, with lag screws through brackets, or with wire in a grid ceiling. Mounting brackets slide in channels on top of case, allowing brackets to be moved to avoid interference with conflicting building structures. Brackets lock in position by tightening set screws. Case to feature internal junction box, allowing it to be installed and wired to building supply wires at an early stage of construction. Junction box to have plug-in style connector, accepting the mating half of the connector from the motorized roller/fabric assembly.

Roller/fabric assembly may be purchased from Draper, Inc. and installed in case at job site. Brackets supporting roller/fabric assembly to slide in a track inside the top of the case, allowing viewing surface to be centered in case regardless of screen size.

Entire unit certified by Underwriters' Laboratories for the U.S. and Canada (except when roller/fabric assembly furnished with Panamax). Patented by Draper, Inc. (U.S. Patent Nos. 6,137,629, 6,421,175 and 6,532,109), other patents pending.

***Access Sonata*—**Motorized screen and masking system in the same case—switch between four projection formats at the touch of a switch. The Access Sonata includes: *A motorized projection screen,* choice of Series V or Series E, up to 10′ wide. *A flat black mask* on a second motor-in-roller converts the screen to the user's choice of 4:3 NTSC, 16:9 HDTV, 1.85:1 WideScreen or 2.35:1 CinemaScope. Width and centerline of screen remain constant.

***Access MultiView*—**Motorized screen and masking system in the same case for dual format projection. The Access MultiView includes: *A motorized projection screen,* your choice of Series V or Series E, in HDTV or WideScreen format up to 10′ wide. *A flat black mask* on a second motor-in-roller converts the screen to 4:3 NTSC video format by masking the sides of the viewing surface.

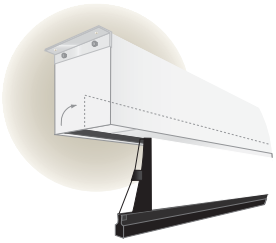


Signature

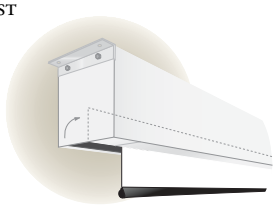
Motorized Screen with Automatic Ceiling Closure

Available in sizes through 16′ wide

The Signature Series offers the clean appearance of a ceiling-recessed screen in virtually any size, with any viewing surface. Ideal for boardrooms and meeting rooms. Case color is white. Signature's independently motorized aluminum ceiling closure disappears *into* the case when the screen is lowered, for a perfectly unobstructed view. Hinges are completely concealed, and the closure is supported for its entire length—no sag is possible. Screen can be operated from any remote position.



Signature/Series V—Features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.

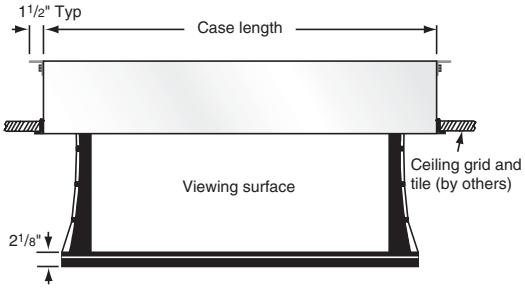


Signature/Series E—Your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey, Panamax or acoustically transparent AT1200 or AT Grey.

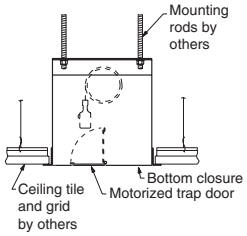
System Options

- ***Extra Drop*, Series V***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional, either white or black.
  **Extra drop will increase case and dowel length. Consult Draper if this dimension is critical.*
- ***Extra Drop, Series E***—Up to 16′ overall height, either white or black (white is standard for Series E in AV format; black for all other formats).
- ***Black Masking Borders***—Borders are optional for Series E in AV format. Borders are standard for Series E in all other formats and for all Series V screens.
- ***Control Options***—Refer to page 5. Controls may be built into case and will increase the overall length of the case.

Case Dimensions

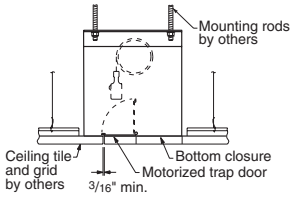


Typical Installation



Installation with Ceiling Tile Attached to Case

(Wt. of tile not to exceed 16 oz./sq. ft.)



ACES Library, University of Illinois at Urbana-Champaign. Phillips Swager Associates/Woolen Molzen and Partners, associated architects.

Dimensions & Data—Signature Series

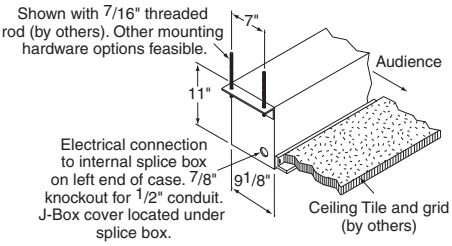
AV Format	*Series E*		*Series V*	
HxW	Case Length	Net Wt. (lbs.)	Case Length*	Net Wt. (lbs.)
50″ x 50″	4′8⅜″	52	5′6″	63
60″ x 60″	5′6⅜″	63	6′5″	75
70″ x 70″	6′4⅜″	75	7′3″	84
84″ x 84″	7′6⅜″	84	8′6¼″	98
72″ x 96″	8′6⅜″	98	9′5″	109
96″ x 96″	8′6⅜″	109	9′7¾″	110
7′ x 9′	9′6⅜″	122	10′6¼″	124
9′ x 9′	9′6⅜″	124	10′9½″	125
8′ x 10′	10′6⅜″	130	11′7¾″	132
10′ x 10′	10′6⅜″	132	11′9½″	136
9′ x 12′	12′6⅜″	153	13′9½″	156
12′ x 12′	12′6⅜″	156	14′1½″	158
10′6″ x 14′	14′9″	190	15′4½″	230
14′ x 14′	14′9″	192	16′½″	240
12′ x 16′	16′9″	215	16′7¼″	250
16' x 16'	16′9″	215	—	—

NTSC Video Format		*Series E*			*Series V*	
Nominal Diagonal	Viewing Area HxW	Case Length	Net Wt. (lbs.)	Viewing Area HxW	Case Length*	Net Wt. (lbs.)
6′	46½″ x 59½″	5′6⅜″	70	42½″ x 56½″	5′7¾″	102
7′	53½″ x 69½″	6′4⅜″	75	50″ x 66½″	6′5¾″	106
100″	64″ x 83½″	7′6⅜″	78	60″ x 80″	7′8¼″	125
10′	73″ x 96″	8′6⅜″	92	72″ x 96″	9′¼″	148
11′	83″ x 108″	9′6⅜″	109	78″ x 104″	9′9½″	159
150′	92″ x 120″	10′6⅜″	117	87″ x 116″	10′9½″	180
15′	109″ x 144″	12′6⅜″	132	108″ x 144″	13′3″	210
200″	123″ x 162″	14′5″	185	118″ x 158″	14′6¾″	235
210″	131″ x 172″	15′1″	190	126″ x 168″	15′6¾″	240
220″	137″ x 180″	15′9″	205	132″ x 176″	16′2¾″	250
230″	143″ x 188″	16′5″	210	138″ x 184″	17′¾″	255
20′	146″ x 192″	16′9″	216	144″ x 192″	17′8¾″	260

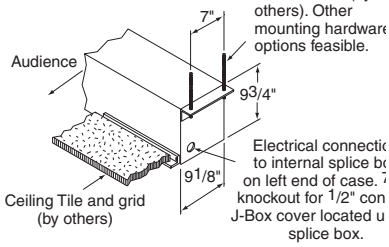
Case dimensions 9¾″ high x 9⅛″ wide in sizes through 144″ wide; 11″ high x 9⅛″ wide in larger sizes. Mounting brackets extend 1½″ in length beyond each end of case. HDTV and WideScreen format also available. 14′ maximum height with Tab Tensioning System.

Signature Method of Installation:

Sizes exceeding 12' wide


Shown with 7/16" threaded rod (by others). Other mounting hardware options feasible.
7"
Audience
11"
Electrical connection to internal splice box on left end of case. 7/8" knockout for 1/2" conduit. J-Box cover located under splice box.
9 1/8"
Ceiling Tile and grid (by others)

Sizes through 12' wide


Shown with 7/16" threaded rod (by others). Other mounting hardware options feasible.
7"
Audience
9 3/4"
Electrical connectio to internal splice bo on left end of case. knockout for 1/2" con J-Box cover located u splice box.
9 1/8"
Ceiling Tile and grid (by others)

Specifications—Signature

General: _____ Projection screens, size_____h. x_____w., electrically operated 60 Hz., 110-120v. ac. 5-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with internal thermal overload protector and electric brake. Motor mounted with sound-absorbing fixtures. Preset, accessible limit switches.

Case finished white. Bottom of case fully enclosed by aluminum panels. Bottom closure panel to be attached to screen case with screws. Independently motorized trap door attached with completely concealed hinges. Trap door supported along both the front and back edges for entire length, (with no crack left between door and case) and automatically opens into case when screen is operated in down direction. Bottom closure and trap door may be removed manually to allow access to roller and drive assembly. Ceiling tile weighing not more than 16 oz. per sq. ft. may be attached to bottom panels. (Minimum 3⁄16″ clearance at back edge of trap door when ceiling tile is applied to door.)

Three-position control switch (or switches-specify number) shall stop or reverse screen at any point in operating cycle. Switch furnished with cover plate.

Signature/Series V: Viewing surface to be (M1300/M2500/HiDef Grey/optional Cineflex), flame and mildew resistant, with black borders. Each side of surface equipped with tab-guide cable system to maintain even lateral tension and hold surface flat. Bottom of surface supported and masked by black extruded aluminum dowel weighted to apply proper vertical tension. Top of surface masked by 12″ black drop.

Signature/Series E: Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey/optional Panamax/optional AT1200/optional AT Grey), flame and mildew resistant. Bottom of viewing surface attached to tubular steel dowel. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Entire unit patented by Draper, Inc. (U.S. Patent No. 5,341,241.) Certified by Underwriters' Laboratories, Inc. for the U.S. and Canada.

Sizes through 12′ x 12′: Roller to be 3″ dia. metal, mounted with sound-absorbing fixtures. ***Sizes larger than 12′ x 12′:*** Roller to be 4″ dia. metal.

Ambassador

Electrically Operated Projection Screen with Automatic Ceiling Closure

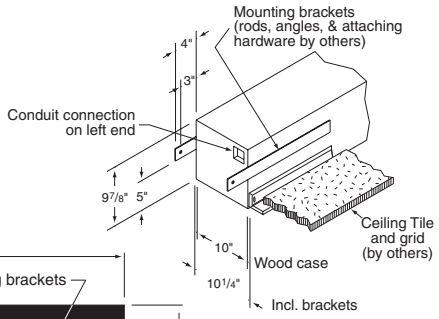
The Draper Ambassador is a direct-drive, heavy-duty, electrically operated screen designed specifically for recessed installation above any type of ceiling.

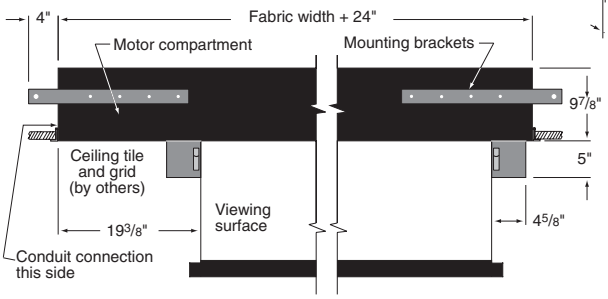
The Ambassador features a fully automatic ceiling closure, which totally conceals the screen when not in use. The ceiling closure can be finished by the contractor to match the ceiling.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

System Options

- ***Extra Drop***—Up to 12′ overall height, either white or black (white is standard).
- ***Black Masking Borders***—optional.
- ***Control Options***—Refer to page 5.





Dimensions & Data—Ambassador

Viewing Surface HxW	Case Length	Net Wt. (lbs.)	Viewing Surface HxW	Case Length	Net Wt. (lbs.)
50″ x 50″	6′2″	105	7′ x 9′	11′	160
60″ x 60″	7′	115	9′ x 9′	11′	170
70″ x 70″	7′10″	120	8′ x 10′	12′	180
84″ x 84″	9′	140	10′ x 10′	12′	185
6′ x 8′	10′	155	9′ x 12′	14′	205
8′ x 8′	10′	160	12′ x 12′	14′	210

Case dimensions—9⅞″ high x 10¼″ wide. Mounting brackets extend 4″ in length beyond ends of case.

Standard Construction

Offset Construction

Extended Hinges

(for Attachment of Ceiling Tile) (Wt. not to exceed 16 oz./sq. ft.)

Specifications—Ambassador

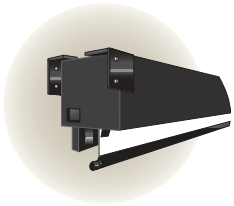
_____ Projection screens, size_____h. x_____w., electrically operated 110-120v. ac, 60 Hz. Motor to be 3-wire, instantly reversible, lifetime lubricated, with thermal overload protector and mechanical brake. Motor mounted on rubber vibration insulators. Preset, accessible limit switches. Entire drive unit easily removed from case. 3-position control switch (or switches-specify number) to stop or reverse screen at any point. Control(s) complete with cover plate. Metal roller, 5″ OD. Zinc plated roller brackets with double row radial ball bearings. Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey), fire and mildew resistant.

Case of ¾″ warp resistant composition wood, with hinged panel for access to motor compartment, finished with primer coat of paint. Motor compartment metal lined. Bottom of case enclosed by two panels. One panel mounted on a continuous hinge, to open and close automatically when screen operates. Hinge mounted to allow matching of bottom panel to ceiling. Second panel semi-permanently attached to wall of case. Entire unit certified by Underwriters' Laboratories, Inc. for the U.S. and Canada.

Envoy

Electrically Operated Screen with Ceiling Closure

Ideal for conference, training and meeting rooms



The Envoy adds a touch of class to any presentation. The screen is recessed in the ceiling and invisible when not in use. At the touch of a switch an automatic ceiling closure opens, and the screen appears. The closure can easily be finished to match the ceiling.

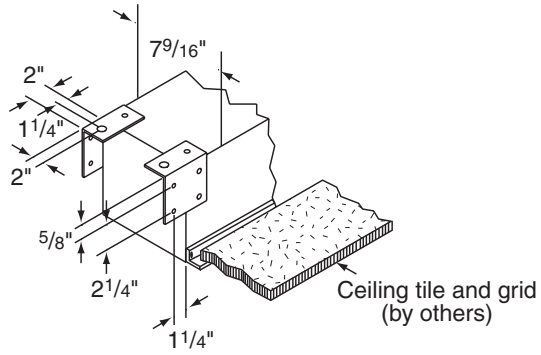
The Envoy operates smoothly and silently. The motor is mounted inside the roller on special vibration insulators. The screen's slender profile makes it easy to install above most ceilings.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey or Panamax.

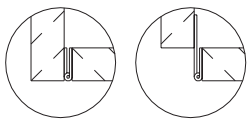
System Options

- ***Extra Drop***—Up to 12′ overall height, either white or black (white is standard for AV format, black for other formats).
- ***Black Masking Borders***—Borders are optional for AV format screens and standard for all other format screens.
- ***Control Options***—Refer to page 5.

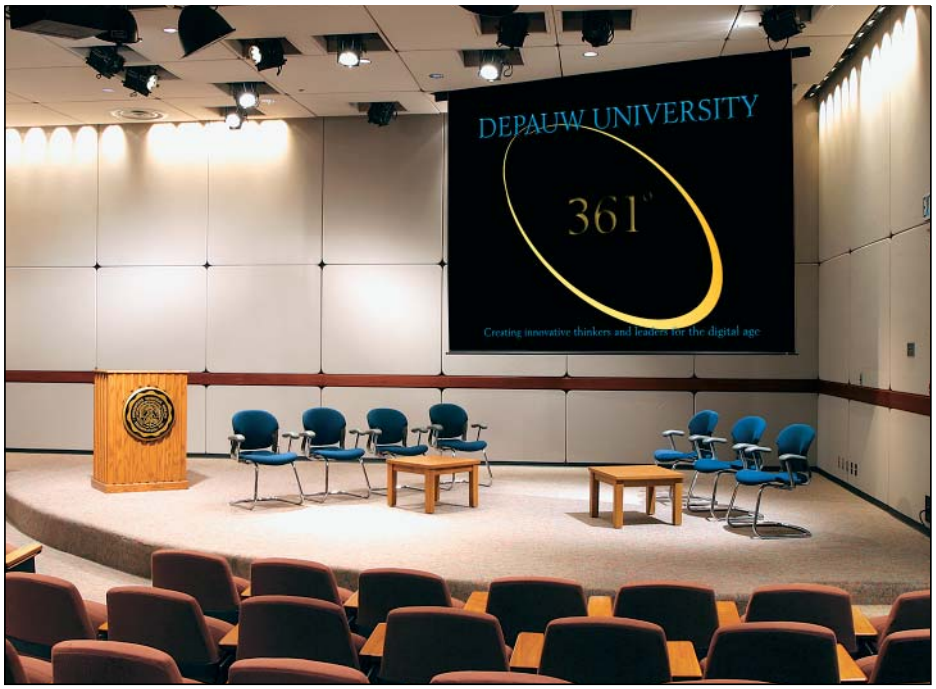
Case Dimensions/Method of Installation



Standard Construction



Optional Offset Construction



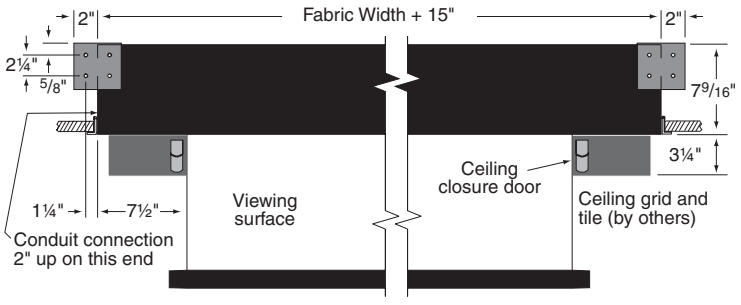
Watson Forum, Center for Contemporary Media, DePauw University, Greencastle, IN.

Dimensions & Data—Envoy

Viewing Surface H x W	Case Length	Distance Between Hanger Eyes	Net Wt. (lbs.)	Viewing Surface H x W	Case Length	Distance Between Hanger Eyes	Net Wt. (lbs.)
50″ x 50″	5′5″	5′7½″	60	7′ x 9′	10′3″	10′5½″	105
60″ x 60″	6′3″	6′5½″	70	9′ x 9′	10′3″	10′5½″	115
70″ x 70″	7′1″	7′3½″	75	8′ x 10′	11′3″	11′5½″	115
84″ x 84″	8′3″	8′5½″	80	10′ x 10′	11′3″	11′5½″	120
72″ x 96″	9′3″	9′5½″	85	9′ x 12′	13′3″	13′5½″	125
96″ x 96″	9′3″	9′5½″	100	12′ x 12′	13′3″	13′5½″	130

NTSC Video Format Nominal Diagonal	Viewing Area	Overall Size	Case Length	Distance Between Hanger Eyes	Net Wt. (lbs.)
6′	42½″ x 56½″	46½″ x 59½″	6′3″	6′5½″	70
7′	50″ x 66½″	53½″ x 69½″	7′1″	7′3½″	75
100″	60″ x 80″	64″ x 83½″	8′3″	8′5½″	80
10′	69″ x 92″	73″ x 96″	9′3″	9′5½″	85
11′	78″ x 104″	83″ x 108″	10′3″	10′5½″	105
150″	87″ x 116″	92″ x 120″	11′3″	11′5½″	115
15′	105″ x 140″	109″ x 144″	13′3″	13′5½″	125

Case dimensions—7 9⁄16″ high x 7 13⁄16″ wide. Mounting brackets extend 2″ in length beyond ends of case. HDTV and WideScreen format also available.



Specifications—Envoy

_____ Projection screens, size_____h. x_____w., electrically operated 110-120v. ac, 60 hz. 3-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with internal thermal overload protector and electric brake. Motor mounted on rubber vibration insulators. Preset, accessible limit switches. Entire roller and drive assembly removal through bottom of case.

Roller to be 3″ dia. metal, mounted on rubber insulated supports. Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey/optional Panamax), fire and mildew resistant. Bottom of viewing attached to tubular steel dowel. Case of ¾″ warp resistant composition wood, unspliced. Wiring compartment metal lined. Bottom of case fully enclosed by two panels, mounted with full-length continuous hinge. One panel to open and close automatically as screen operates. Second panel opens manually for access to electrical connections, limit switches and screen surface. Hinges mounted to allow matching of bottom panels to ceiling. Case painted with flat black primer.

Three-position control switch, complete with coverplate, shall stop or reverse screen at any point. Entire unit certified by Underwriters' Laboratories, Inc. for the U.S. and Canada (except when furnished with Panamax viewing surface).

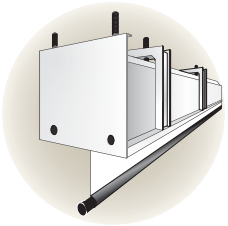
Paragon

Large Motor-in-Roller Projection Screen

Designed for auditoriums and lecture halls

Sizes through 28′ wide or 35′ diagonal

NEW FEATURE



Peeler Auditorium, Peeler Art Center, DePauw University, Greencastle, IN. Patent pending.

Choose the Paragon for auditoriums, lecture halls and any setting where a very large screen is required. Sizes up to 21′ x 28′ or 35′ diagonal for even the largest audiences. Newly redesigned case of white extruded aluminum can be suspended anywhere, with controls wherever they're needed.

Your choice of a conventional viewing surface: fiberglass matt white or glass beaded.

System Options

- ***Extra Drop***—Up to 21′ total screen height, either white or black (white standard on AV format screens, black on all others).
- ***Black Masking Borders***—Borders are optional for AV format screens and standard for all other format screens.
- ***Control Options***—Refer to page 5.
- ***Wall Mounting Brackets***—For wall installation. Includes hardware for attaching brackets to case.
- ***Ceiling Trim Flange for Paragon Endcaps***—Includes hardware for attaching flanges to case.
- ***Ceiling Trim Flange for Paragon Case***—12′ length of ceiling trim flange for case, with hardware for attaching it to case. Please divide length of case requiring trim (in feet) by 12 and round to next whole number to determine number of kits to order. Remember to order trim for both front and back of case if required.

Dimensions & Data—Paragon

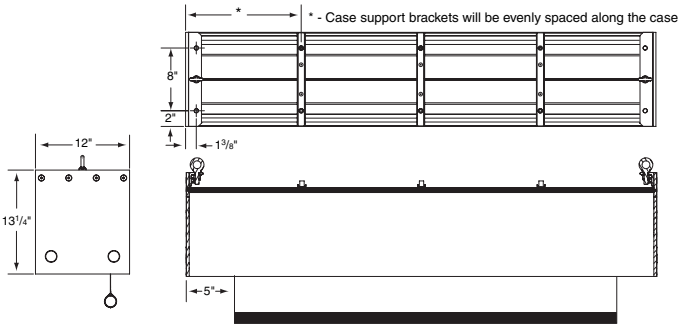
Viewing Area HxW	Case Length	Net Wt. (lbs.)	Viewing Area HxW	Case Length	Net Wt. (lbs.)
15′ x 20′	20′10″	796	18′ x 24′	24′10″	950
20′ x 20′	20′10″	805	24′ x 24′	24′10″	960
11′ x 22′	22′10″	840	13′ x 26′	26′10″	970
16½′ x 22′	22′10″	850	19½′ x 26′	26′10″	980
22′ x 22′	22′10″	861	14′ x 28′	28′10″	1000
12′ x 24′	24′10″	930	21′ x 28′	28′10″	1050

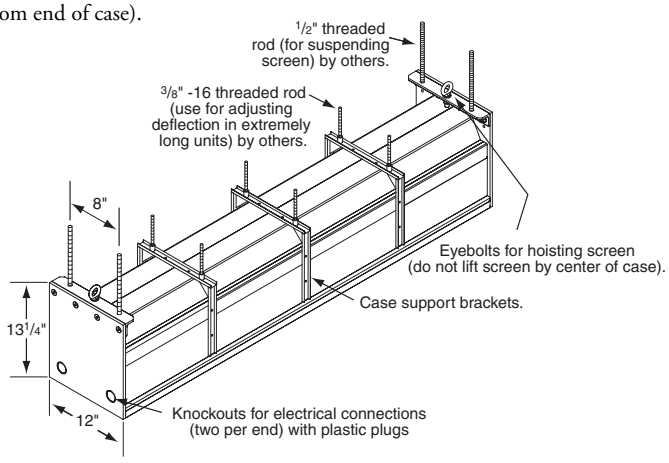
NTSC Video Format

Nominal Diagonal	Viewing Area HxW	Overall Size	Case Length	Net Wt. (lbs.)
25′	177″ x 236″	182″ x 240″	20′10″	805
27½′	194″ x 260″	199″ x 264″	22′10″	850
30′	212″ x 284″	217″ x 288″	24′10″	950
32½′	230″ x 308″	235″ x 312″	26′10″	970
35′	248″ x 332″	253″ x 336″	28′10″	1050

Case dimensions 13¼″ high x 12″ wide. Optional wall mounting brackets extend 1¾″ beyond each end of case (hole centers are 1″ from end of case).

Case Dimensions/Method of Installation




1/2" threaded rod (for suspending screen) by others.
3/8" -16 threaded rod (use for adjusting deflection in extremely long units) by others.
8"
Eyebolts for hoisting screen (do not lift screen by center of case).
Case support brackets.
13 1/4"
12"
Knockouts for electrical connections (two per end) with plastic plugs

Specifications—Paragon

_____ Projection screens, size_____h. x_____w., electrically operated 110-120 v. ac, 60 Hz. 3-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with internal thermal overload protector and mechanical brake. Motor mounted with sound-absorbing fixtures. Preset, accessible limit switches. Junction-box inside case accessible via 22 ga. steel cover plate. Entire roller and drive assembly easily removable through bottom of case.

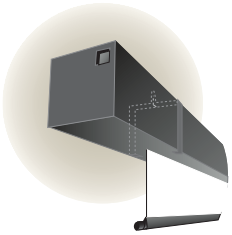
Roller to be 6″ OD x ⅛″ wall steel tube. Roller brackets to be painted white and to have double row radial ball bearings. Viewing surface to be (fiberglass matt white/glass beaded), flame and mildew resistant. Dowel shall be 1½" OD steel tube with black polyethylene endcaps.

Case constructed of extruded aluminum. Bottom of case fully enclosed except for slot allowing fabric passage. Bottom closure panel shall be extruded aluminum, finished white, and may be removed manually for access to roller and drive unit. Closure panel shall be held in place by screw and bracket at each end of case. Aluminum endplates with integrated steel brackets for suspended mounting shall be fastened to extruded case with thread-cutting screws. Eyebolts shall be provided for hoisting screen. Case support brackets shall be welded steel channel, riveted to exterior of case.

Three-position control switch (or switches-specify number) shall stop or reverse screen at any point. Controls to be furnished complete with cover plate.

Entire unit certified by Underwriters' Laboratories, Inc. for the U.S. and Canada.

Rolleramic



Heavy-Duty Motorized Screen for Large Audiences

Ideal for auditoriums and lecture rooms

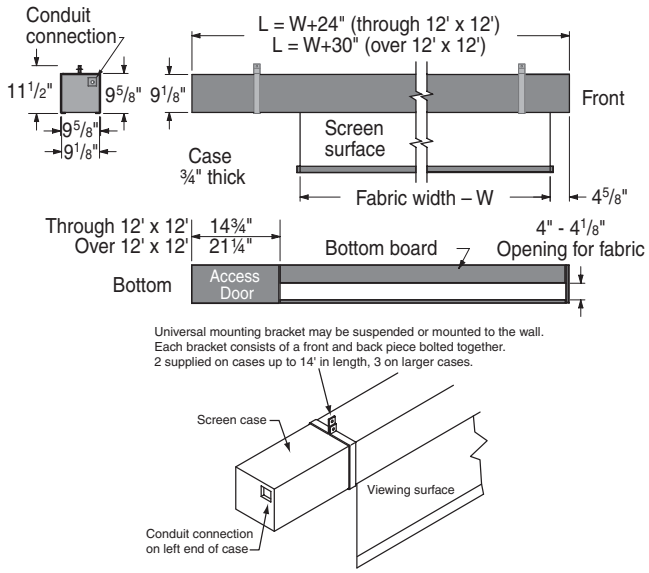
The Rolleramic comes in sizes through 20′ x 20′ or 25′ diagonal to accommodate large presentations. All-wood case may be recessed in the ceiling or painted to match its surroundings. The viewing surface is concealed when not in use; lower it to any position at the touch of a switch. The direct drive module is mounted on rubber vibration insulators.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey or optional Panamax viewing surface.

System Options

- ***Extra Drop***—Up to 20′ total screen height, either white or black.
- ***Black Masking Borders***—Borders are optional for AV format screens and standard for all other format screens.
- ***Triangular Shaped Steel Slat***—At bottom of projection surface. With screen recessed above ceiling, the triangular slat can be set to stop flush with the ceiling, for a clean installation.
- ***Mounting Brackets***—Universal brackets for wall or ceiling mount included, of ¼″ thick strap steel. Can also be installed above the ceiling line.
- ***Control Options***—Refer to page 5.

Case Dimensions/Method of Installation



Universal mounting bracket may be suspended or mounted to the wall.
Each bracket consists of a front and back piece bolted together.
2 supplied on cases up to 14' in length, 3 on larger cases.
Screen case
Viewing surface
Conduit connection on left end of case

Olin Auditorium, F.W. Olin Biological Sciences Building, DePauw University, Greencastle, IN.

Dimensions & Data—Rolleramic

Viewing Area HxW	Case Length	Net Wt. (lbs.)	Viewing Area HxW	Case Length	Net Wt. (lbs.)
50″ x 50″	6′2″	90	9′ x 12′	14′†	175
60″ x 60″	7′	95	12′ x 12′	14′†	180
70″ x 70″	7′10″	105	10′6″ x 14′	16′6″	210
84″ x 84″	9′	120	14′ x 14′	16′6″	220
72″ x 96″	10′	130	12′ x 16′	18′6″	240
96″ x 96″	10′	135	16′ x 16′	18′6″	245
7′ x 9′	11′†	135	13′6″ x 18′	20′6″	290
9′ x 9′	11′†	140	18′ x 18′	20′6″	320
8′ x 10′	12′†	150	8′ x 20′	22′6″	310
10′ x 10′	12′†	155	15′ x 20′	22′6″	350
			20′ x 20′	22′6″	380

NTSC Video Format

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
6′	42½″ x 56½″	46½″ x 59½″	7′	95
7′	50″ x 66½″	53½″ x 69½″	7′10″	105
100″	60″ x 80″	64″ x 83½″	9′	120
10′	69″ x 92″	73″ x 96″	10′	130
11′	78″ x 104″	83″ x 108″	11′†	135
150″	87″ x 116″	92″ x 120″	12′†	150
15′	105″ x 140″	109″ x 144″	14′†	175
200″	118″ x 158″	123″ x 162″	16′	210
20′	141″ x 188″	146″ x 192″	18′6″	240
250′	148″ x 198″	153″ x 202″	19′4″	285
25′	177″ x 236″	182″ x 240″	22′6″	350

Case dimensions—9⅛″ H x 9⅛″ w. Height of hangers above case—2⅝″.
†Case will be 6″ longer with Panamax viewing surface.

Specifications—Rolleramic

_____ Projection screens, size_____h. x_____w., electrically operated 60 Hz., 110-120v. ac. Motor to be 3-wire, instantly reversible, designed for the purpose, lifetime lubricated. With internal thermal overload protector and mechanical brake. Motor mounted on rubber vibration insulators. Preset, accessible limit switches. Entire drive unit easily removable from case. Three-position control switch (or switches: specify number) to stop or reverse screen at any point. Switch(es) furnished complete with coverplate.

Roller to be heavy gauge metal 5″ O.D. Zinc plated roller brackets to have double row radial ball bearings. Viewing surface to be (fiberglass matt white[1]/glass beaded[2]/High Contrast Grey/optional Panamax[3]), fire and mildew resistant. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Case of ¾″ warp resistant composition wood, with hinged panel for motor compartment, finished with primer coat of paint. Motor compartment to be metal lined. Bottom of case fully enclosed except slot allowing fabric passage. Steel mounting brackets, at least ¼″ thick, wrap under bottom edge of case. Entire unit certified by Underwriters' Laboratories, Inc. for the United States and Canada (except when furnished with Panamax).

[1]Matt white screens require heavy-duty motor whenever total fabric (including extra drop) exceeds 144 sq. ft.

[2]Glass beaded screens require heavy-duty motor when overall height exceeds 12′ AND total fabric (including extra drop) exceeds 108 sq. ft.

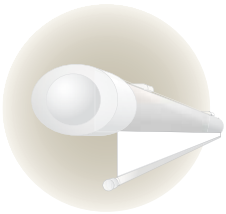
[3]Panamax screens require heavy-duty motor when overall width exceeds 8′. Screens with Panamax viewing surface have not been submitted to Underwriters' Laboratories and are not listed as approved by that organization.

Salara

You've never seen a screen like this before

NEW

In your home or office, the Salara makes a design statement on your wall.



The Salara's small, elliptical case and domed endcaps are finished in solid white. Floating gunlatch wall mounting brackets grip the screen case securely and are barely visibile. Power connection is via back of case.

The result—the most attractive screen you've ever seen.

Your choice of conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey, AT1200 or AT Grey.

System Options

- ***Extra drop***—Up to 8′ overall height, either white or black (white is standard for AV format, black for other formats).
- ***Black masking borders***—Borders are optional for AV format screens and standard for all other format screens.
- ***Control options***

  Hardwired—Refer to page 5. Wired like other Draper motorized screens. Can be furnished with any standard control options.

  Hardwired with built-in RF receiver—This version includes a hand-held radio frequency remote control. Motor is hardwired like all standard Draper motorized screens. Wireless wall switch is optional.

  Hardwired with built-in IR receiver—This version includes a hand-held infrared remote control. Motor is hardwired like all standard Draper motorized screens.

  Plug & Play™ Version—With Draper's all new Plug & Play option, you can have a remote controlled screen on your wall in 10 minutes—no electrician required. Plug & Play includes a built-in receiver and hand-held transmitter in your choice of RF or IR. It also includes 10′ of IEC cord, which plugs into socket in the back of the case and the nearest wall outlet. Wireless wall switch is optional for RF version.

  Just hang it on the wall, and you're in business!

(Left) Back view of Salara case showing Plug & Play option. Patent pending.

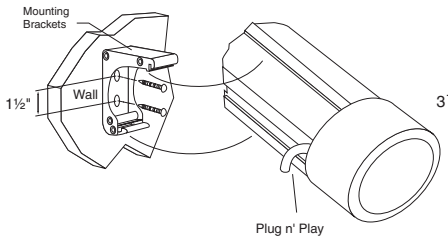
Dimensions & Data

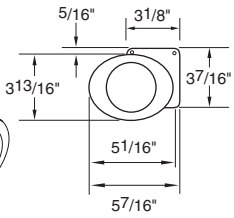
Viewing Area H x W	Case Length	Net Wt. (lbs.)	Viewing Surface H x W	Case Length	Net Wt. (lbs.)
50″ x 50″	4′8⅞″	23	84″ x 84″	7′6⅞″	35
60″ x 60″	5′6⅞″	26	72″ x 96″	8′7⅞″	38
70″ x 70″	6′4⅞″	30	96″ x 96″	8′7⅞″	41

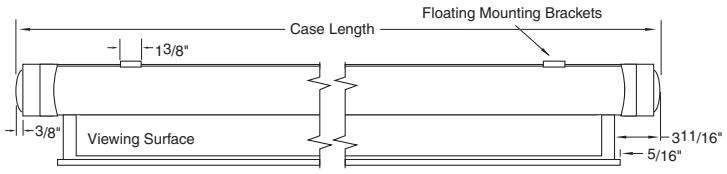
NTSC Video Format

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
6′	42½″ x 56½″	46½″ x 59½″	5′6⅞″	25
7′	50″ x 66½″	53½″ x 69½″	6′4⅞″	29
100′	60″ x 80″	64″ x 83½″	7′6⅞″	34
10′	69″ x 92″	73″ x 96″	8′7⅞″	38

Case Dimensions/Method of Installation







Specifications—Salara

_____Projection screens, size_____h. x _____w., wall mounting. Elliptical case of extruded aluminum, with painted white finish. Injection molded plastic endcaps with domed contour shape, finished to match case. Case shall accept adjustable wall mounting brackets that snap easily into place and slide anywhere along length of case.

Electrically operated ([110-120v AC, 60 hz.] [220v AC, 50 hz.] [220v AC CE]) 3-wire motor mounted inside (1¾″) motor roller, instantly reversible, lifetime lubricated, with thermal overload protector and electric brake. Preset, accessible limit switches. U.S. patent pending.

Wiring/Control Options:

Plug & Play™—Provided with built-in RF or IR receiver, hand-held RF or IR remote and 10′ (3 m) IEC cordset. No wiring necessary. Available in 110-120v and 220-240V. 3-position wireless wall switch optional for RF version.

Hardwired—Provided with 3-position wall switch for 110-120v or 220-240v.

Hardwired RF—Provided with hand-held remote transmitter. Wireless RF wall switch optional.

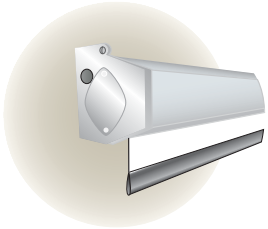
Hardwired IR—Provided with hand-held infrared remote transmitter.

Viewing surface of (Fiberglass matt white/glass beaded/optional High Contrast Grey/AT1200/AT Grey), flame and mildew resistant. Fabric attached to one-piece rigid steel roller. Bottom of viewing surface attached to ⅞″ dia. roll formed steel dowel, finished white. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Targa

Motor-in-Roller Screen

Ideal for lecture and conference rooms, classrooms and churches

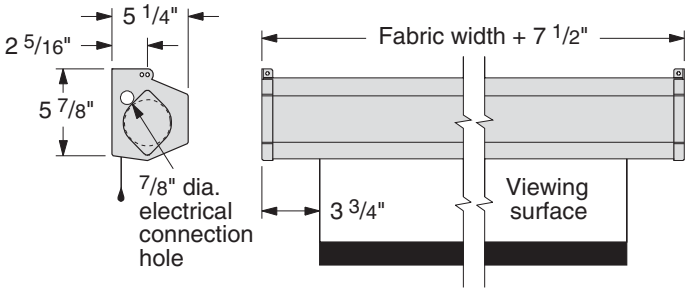


Targa—for beauty and reliability. Draper's motor-in-roller design allows viewing surface to be centered in its one-piece steel case for a trim, balanced appearance. The motor is mounted inside the roller on special vibration insulators, so operating noise is dramatically reduced. Case color is white.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey, optional Panamax, AT1200 or AT Grey.

System Options

- ***Extra Drop***—Up to 12′ overall height, either white or black (white is standard for AV format, black for other formats).
- ***Black Masking Borders***—Borders are optional for AV format screens and standard for all other format screens.
- ***Projected Mounting Brackets***—6″ clearance for wall-mounted equipment below screen.
- ***Control Options***—Refer to page 5.
- ***Ceiling Opening Trim Kit***—For ceiling-recessed installation. (See below.)



Hillcrest Baptist Church, Richmond, IN. Installation by MCSi, Indianapolis.

Dimensions & Data—Targa

Viewing Area HxW	Case Length	Net Wt. (lbs.)	Viewing Area HxW	Case Length	Net Wt. (lbs.)
50″ x 50″	4′9″	24	7′ x 9′	9′7″	44
60″ x 60″	5′7″	28	9′ x 9′	9′7″	46
70″ x 70″	6′5″	33	8′ x 10′	10′7″	50
84″ x 84″	7′7″	37	10′ x 10′	10′7″	54
72″ x 96″	8′7″	41	9′ x 12′	12′7″	57
96″ x 96″	8′7″	42	12′ x 12′	12′7″	62

NTSC Video Format

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
6′	42½″ x 56½″	46½″ x 59½″	5′7″	28
7′	50″ x 66½″	53½″ x 69½″	6′5″	33
100″	60″ x 80″	64″ x 83½″	7′7″	37
10′	69″ x 92″	73″ x 96″	8′7″	41
101′	78″ x 104″	83″ x 108″	9′7″	44
150″	87″ x 116″	92″ x 120″	10′7″	50
15′	105″ x 140″	109″ x 144″	12′7″	57

Case dimensions—5 3/16″ high x 5¼″ wide. Hanging brackets extend ⅝″ in height above screen case.

Ceiling Opening Trim Kit

Designed for ceiling-recessed installation of Premier or Targa motorized projection screens. Trims out the ceiling opening and attaches to screen end caps. Forms a finished slot in the ceiling allowing for passage of the viewing surface. Painted white to match ceiling grid. This accessory results in a professional, attractive ceiling-recessed installation. Slot includes finished flange to accept acoustical ceiling tile or grid. Slot measures only 2⅛″ in width.

With the Draper Ceiling Trim Kit, the slot is always exactly the right size and in precisely the right location! Finished slot is always flush, square, attractive and the same length as the screen case.

For Ceiling-Recessed Targa & Premier screens

Ceiling Opening Trim Kit on a Targa projection screen (left). The finished slot is always the same length as the Targa or Premier case. The Ceiling Opening Trim Kit is available for all sizes of Targa and Premier screens.

Specifications—Targa

_____ Projection screens, size_____h. x_____w., electrically operated 110-120v. ac, 60 Hz. Motor mounted inside screen roller, 3-wire, instantly reversible, lifetime lubricated. Equipped with internal thermal overload protector and electric brake. Motor mounted on rubber vibration insulators. To have preset, accessible limit switches. Roller to be 3″ dia. metal, mounted on rubber insulated supports.

Viewing surface of (fiberglass matt white/glass beaded/High Contrast Grey/optional Panamax/optional AT1200/optional AT Grey), fire retardant and mildew resistant. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless. Bottom of viewing surface attached to ⅜″ dia. steel rod.

Case of 22 ga. steel with flat back design and baked-on plastisol finish in white. Case formed from one piece steel. Endcaps of 12 ga. steel, finished to match case, forming universal (wall or suspended) hanging brackets.

Three-position control switch shall stop or reverse screen at any point in the operating cycle. Switch(es) furnished complete with coverplate.

Optional white aluminum ceiling slot available to trim opening when screen is to be recessed above the ceiling.

Entire unit certified by Underwriters' Laboratories, Inc. for the United States and Canada (except when furnished with Panamax viewing surface).

Premier

Motorized Screen with Tab Tensioning System

Perfectly flat surface delivers exceptional image clarity— for video and data projection

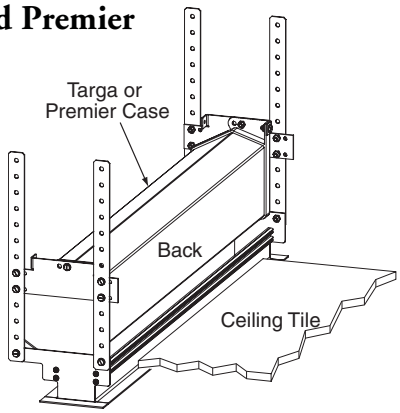
The Premier's automatic Tab Tensioning System delivers perfect picture quality with its perfectly flat viewing surface. Steel case and special tensioning dowel are finished in flat black. The Premier's motor is mounted inside the roller on special vibration insulators, so operation is smooth and silent.

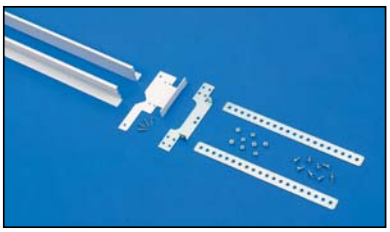
Your choice of M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.

System Options

- ***Extra Drop***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional. Extra drop will increase the overall length of case.
- ***Black Masking Borders***—Standard for all formats.
- ***Projected Mounting Brackets***—provides a 6″ clearance.
- ***Control Options***—Refer to page 5.

Ceiling Opening Trim Kit for Targa and Premier





Ceiling Opening Trim Kit parts and accessories

Julian Colloboratory, Julian Science and Mathematics Center, DePauw University, Greencastle, IN.

Dimensions & Data—Premier

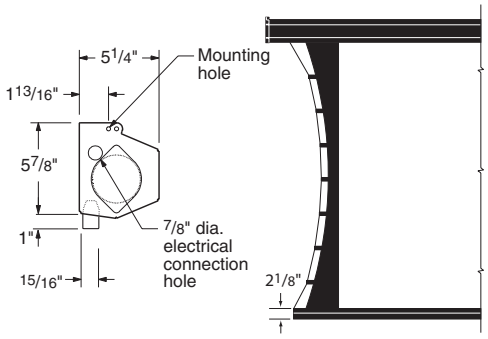
Viewing Surface HxW	Case Length	Dowel Length	Net Wt. (lbs.)	Viewing Surface HxW	Case Length	Dowel Length	Net Wt. (lbs.)
50″ x 50″	5′8″	5′1¼″	30	7′ x 9′	10′8¼″	10′1½″	70
60″ x 60″	6′6¾″	6′¼″	35	9′ x 9′	10′9¾″	10′3″	75
70″ x 70″	7′5″	6′10¼″	40	8′ x 10′	11′9¾″	11′3″	80
84″ x 84″	8′8¼″	8′1½″	50	10′ x 10′	11′11½″	11′4¾″	85
72″ x 96″	9′7″	9′¼″	55	9′ x 12′	13′9¾″	13′3″	90
96″ x 96″	9′9¾″	9′3″	60	12′ x 12′	14′3½″	13′8¾″	100

NTSC Video Format

Nominal Diagonal	Viewing Area	Case Length	Dowel Length	Net Wt. (lbs.)
6′	42½″ x 56½″	6′2″	5′7¾″	35
7′	50″ x 66½″	7′¼″	6′5¾″	40
100″	60″ x 80″	8′1¾″	7′8¼″	50
10′	72″ x 96″	9′7″	9′¼″	55
11′	78″ x 104″	10′4¼″	9′9½″	65
150″	87″ x 116″	11′4¼″	10′9½″	78
15′	108″ x 144″	13′9¾″	13′3″	90

Extra drop will increase overall case length.

Case Dimensions/Method of Installation



Specifications—Premier

_____ Projection screens, size_____h. x_____w., electrically operated 110-120v. ac, 60 Hz. Motor mounted inside screen roller, 3-wire, instantly reversible, lifetime lubricated. Equipped with internal thermal overload protector and electric brake. Motor mounted on rubber vibration insulators. Preset, accessible limit switches. 3″ dia. metal roller, mounted on rubber insulated supports.

Viewing surface of (M1300/M2500/HiDef Grey/optional Cineflex), mildew resistant, with black masking borders. Each side of surface to have tab-guide cable system to maintain even lateral tension and hold surface flat. Bottom of surface supported and masked by black, extruded aluminum dowel weighted to apply proper vertical tension. Top of surface masked by 12″ black drop.

Case of one piece 22 ga. steel with flat back design and baked-on black plastisol finish. Endcaps of 12 ga. black epoxy powdercoat finish steel fully enclosing roller ends and forming universal (wall or suspended) hanging brackets.

Three-position control switch to stop or reverse screen at any point. Switch complete with cover plate. Optional white aluminum ceiling slot available to trim opening when screen is to be recessed above the ceiling.

Entire unit certified by Underwriters' Laboratories, Inc. for the U. S. and Canada.

Artisan

The finest standard in projection screen design

The beauty and grace of hand-rubbed hardwood or the spare modern lines of plastic laminate

Craftsmanship to complement the finest furnishings

Artisan/Series M

Artisan Series projection screens complement the fine furniture in your conference room. They are enclosed in solid hardwood cases with a variety of finishes to match virtually any decor—or in sleek, contemporary plastic laminate.

Artisan/Series V—Motorized screen features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500 or HiDef Grey.

Artisan/Series E—Motorized screen with your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

Artisan/Series M—Manual, spring-roller operated screen with your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

System Options

- ***Case Styles***—Hardwood cases are available in four styles.
- ***Case Finishes***—Choose from seven hardwoods and five laminates. Custom finishes are available.
- ***Extra Drop***— 12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional, either white or black (black is standard for Series V. White is standard for Series E and M in AV format; black in other formats).
- ***Black Masking Borders***—Borders are optional for Series E and M in AV format. They are standard for all Series V screens, and for Series E and M in all other formats.
- ***Control Options***—Refer to page 5.

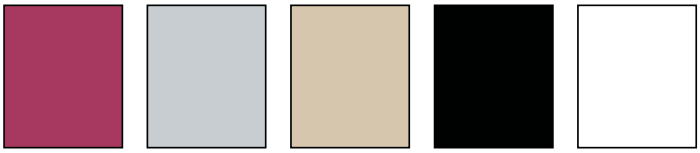
Case Styles and Finishes

Radius ***Rectilinear*** ***Traditional*** ***Bevel***

Solid Hardwoods

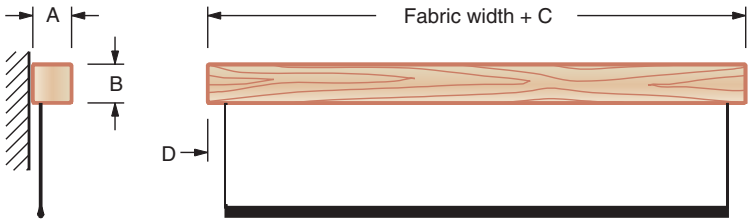
Natural Maple *Natural Cherry* *Light Oak* *Medium Oak* *Walnut* *Medium Cherry* *Mahogany*

Plastic Laminates



Burgundy *Dove Grey* *Beige* *Black* *White*

Case Dimensions



	A	B*	C	D
Series E	5″	5¼″	12″	6″
Series M				
Through 70″ x 70″	3½″	3½″	3″	1½″
Over 70″ x 70″	4¼″	4¼″	4″	2″
Series V	6″	6⅜″	—VARIABLE—	

*Add 1½″ to height if case is to be bevel style.

Artisan/Series V

Installation by MCSi–Midwest Region.

Photography by Barry Rustin, Glenview, IL.

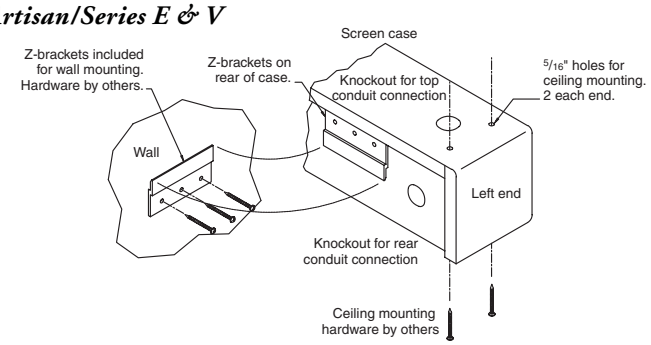
Dimensions & Data—Artisan Series

AV Format		*Series M*		*Series E*		*Series V*		
	H x W	Case Length	Net Wt. (lbs.)	Case Length	Net Wt. (lbs.)	Case Length	Dowel Length	Net Wt. (lbs.)
	50″ x 50″	4′5″	17	5′2″	50	6′1⅜″	5′1¼″	55
	60″ x 60″	5′3″	19	6′	55	7′⅜″	6′¼″	60
	70″ x 70″	6′1″	21	6′10″	60	7′10⅝″	6′10¼″	70
	84″ x 84″	7′4″	39	8′	75	9′1⅞″	8′1½″	80
	72″ x 96″	8′4″	42	9′	80	10′⅝″	9′¼″	85
	96″ x 96″	8′4″	43	9′	85	10′3⅜″	9′3″	90

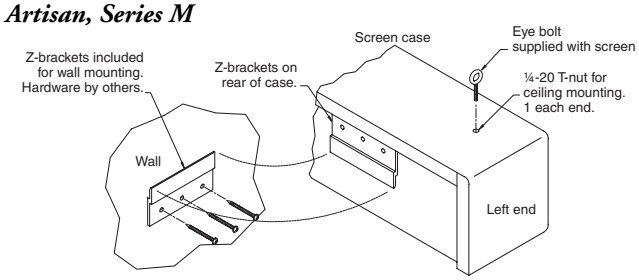
NTSC Video Format		*Series M*		*Series E*			*Series V*		
Nominal Diagonal	Viewing Area	Case Length	Net Wt. (lbs.)	Case Length	Net Wt. (lbs.)	Viewing Area	Case Length	Dowel Length	Net Wt. (lbs.)
6′	42½″ x 56½″	5′3″	19	6′	55	42½″ x 56½″	6′7⅝″	5′7¾″	60
7′	50″ x 66½″	6′1″	21	6′10″	60	50″ x 66½″	7′5⅞″	6′5¾″	70
100″	60″ x 80″	7′4″	33	8′	70	60″ x 80″	8′8⅜″	7′8¼″	80
10′	69″ x 92″	8′4″	38	9′	80	72″ x 96″	10′⅝″	9′¼″	85

Method of Installation

Artisan/Series E & V


Screen case
Z-brackets included for wall mounting. Hardware by others.
Z-brackets on rear of case.
Knockout for top conduit connection
5/16" holes for ceiling mounting. 2 each end.
Wall
Left end
Knockout for rear conduit connection
Ceiling mounting hardware by others

Artisan, Series M


Screen case
Eye bolt supplied with screen
Z-brackets included for wall mounting. Hardware by others.
Z-brackets on rear of case.
¼-20 T-nut for ceiling mounting. 1 each end.
Wall
Left end

Specifications—Artisan/Series V, E & M

_____ Projection screens, size _____h. x _____w., electrically operated 110-120v., 60 hz., 1 ph. 3-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with internal thermal overload protector and electric brake. Preset, accessible limit switches. Entire roller and drive assembly removal to require access through bottom of case only. Roller of 3″ dia. metal.

Case shall be designed for either wall or ceiling mounting, free of exposed screwheads. Wiring compartment metal lined. Bottom of case to be partially enclosed by hinged panel, to open manually. Case of select quality (specify hardwood: Natural maple/natural cherry/medium cherry/light oak/medium oak/walnut/mahogany), styling (radius/rectilinear/traditional/bevel). ALTERNATE: Case of 7/16″ particleboard, 45 lb. density, covered with high pressure laminate, (specify color), styling rectilinear.

Artisan/Series V: Viewing surface to be (M1300/M2500/HiDef Grey), mildew resistant, with black masking borders. Each side of surface to have tab-guide cable system for even lateral tension and flat surface. Bottom of surface supported and masked by black, extruded aluminum dowel weighted to apply proper vertical tension. Top of surface masked by 12″ black drop.

Artisan/Series E: Viewing surface (fiberglass matt white/glass beaded/High Contrast Grey), flame and mildew resistant. Note: All viewing surfaces will be seamless.

Three-position control switch (or switches—specify number) shall stop or reverse screen at any point. Switch(es) to be furnished with cover plate. Entire unit certified by Underwriters' Laboratories, Inc. for the United States and Canada.

Artisan/Series M: Viewing surface (fiberglass matt white/glass beaded/optional High Contrast Grey), flame and mildew resistant, securely mounted to one-piece rigid steel roller. Bottom of viewing surface to be doublestitch hemmed around hardwood slat. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Silhouette

The Shape of the Future

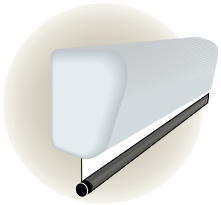
Available with or without Tab Tensioning System

We changed the appearance of projection screens with a revolutionary case design. The Silhouette's case conceals everything:

- *Mounting fixtures*
- *Fasteners*
- *Electrical connections*
- *Optional controls*
- *Viewing surface retracts completely inside case*

The innovative case installs cleanly, and the front fascia is easily removable for access to the inside components. Its slender fascia and endcaps are made of gently radiused aluminum and present a strikingly modern appearance. There is no need to conceal the Silhouette—it will complement the other high tech equipment in your room.

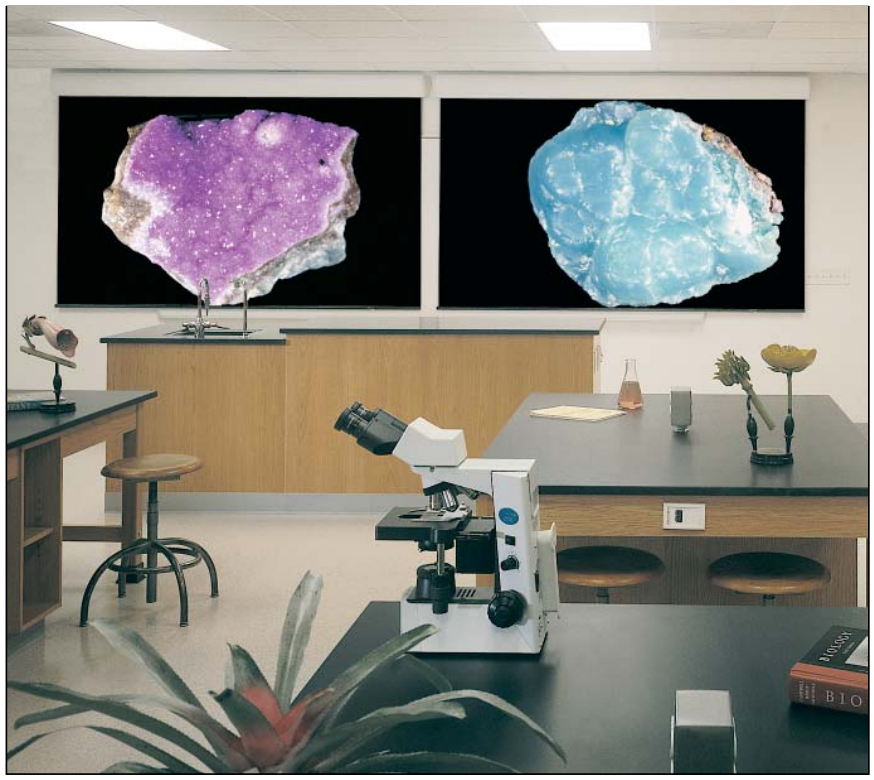
Silhouette/Series V—Motorized screen features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.



Silhouette/Series E—Motorized screen features your choice of a conventional viewing surface: fiberglass matt white, glass beaded, High Contrast Grey or acoustically transparent AT1200 or AT Grey.

Silhouette/Series M—Manual, spring-roller operated screen with your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

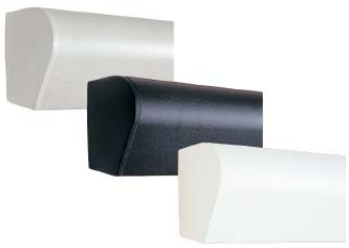
Silhouette/Series C—Manual, spring-roller operated screen features Draper's Tab Tensioning System for a perfectly flat projection surface. Choose M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.



Lapham Hall, University of Wisconsin-Milwaukee. Installation by SPL Integrated Solutions. Photography by Barry Rustin, Glenview, IL.

System Options

- ***Extra Drop***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional, either white or black (black is standard for Series V. White is standard for Series E and M in AV format; black in other formats). Extra drop will increase the overall length of the case of a Series V.
- ***Black Masking Borders***—Borders are optional for Series E in AV format. Borders are standard for Series E in all other formats and for all Series V screens.
- ***Control Options***—Refer to page 5. Controls may be built into case and will increase the overall length of the case.
- ***Case Finishes***—Choose dove grey (standard), black or white lightly textured finish. Dowels on all series retract completely inside case.



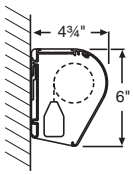
Dimensions & Data—Silhouette Series

AV Format		*Series M*		*Series E*			*Series V*		*Series C*	
	H x W	Case Length	Net Wt. (lbs.)	Case Length*	Net Wt. (lbs.)		Case Length*	Net Wt. (lbs.)	Case Length*	Net Wt. (lbs.)
	50″ x 50″	4′4½″	18	5′1½″	27		6′¾″	33	6′1¾″	30
	60″ x 60″	5′2½″	21	5′11½″	29		6′11¾″	35	7′	32
	70″ x 70″	6′½″	25	6′9½″	34		7′9¾″	40	7′11″	37
	84″ x 84″	7′2½″	28	7′11½″	40		9′1″	46	9′2½″	43
	72″ x 96″	8′3″	29	9′	48		9′11¾″	57	10′1″	54
	96″ x 96″	8′3″	33	9′	53		10′2½″	59	10′4¼″	56

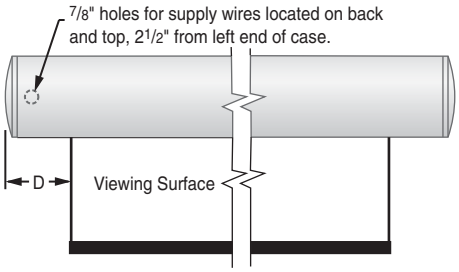
NTSC Video Format		*Series M*		*Series E*			*Series V*		*Series C*	
Nominal Diagonal	Viewing Area (E/M)	Case Length	Net Wt. (lbs.)	Case Length*	Net Wt. (lbs.)	Viewing Area (V/C)	Case Length*	Net Wt. (lbs.)	Case Length*	Net Wt. (lbs.)
6′	42½″ x 56½″	5′2½″	20	5′11½″	26	42½″ x 56½″	6′7¼″	39	6′7¾″	36
7′	50″ x 66½″	6′½″	24	6′9½″	31	50″ x 66½″	7′5¼″	43	7′6¼″	40
100″	60″ x 80″	7′2½″	25	7′11½″	37	60″ x 80″	8′7¾″	47	8′7¾″	44
10′	69″ x 92″	8′3″	29	9′	45	72″ x 96″	9′11¾″	54	10′1″	51

*Optional built-in controls will increase length of case. In Series V and C, extra drop also increases case length.

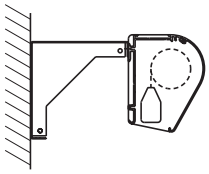
Silhouette Case Construction/ Method of Installation



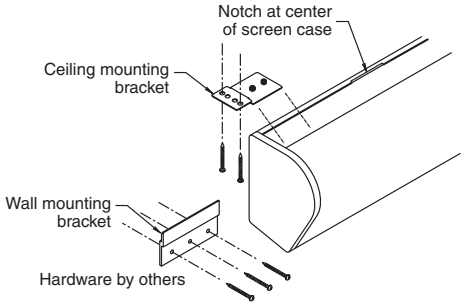
Series V and C dowel shown at left: Series E and M surface and dowel shown at right. Both dowels retract completely inside case.



Silhouette	Operation	D
Series E	Motorized	5 5/16"
Series M	Spring	1 1/2"
Series V	Motorized, Tab Tensioned	Varies
Series C	Crank, Tab Tensioned	Varies



Mounting on Extension Wall Brackets



Specifications—Silhouette

_____Projection screens, size_____h. x_____w., wall or ceiling mounting. Case finished (white/black/grey), free of exposed fasteners. Back and top of extruded aluminum in L-shaped section; front in a contoured shape. Endcaps die-cast, of rounded design, flush with case contour. Front section easily removable for access to operator and viewing surface. All viewing surfaces will be seamless.

Silhouette/Series V: Viewing surface of (M1300/M2500/HiDef Grey/optional Cineflex), with black masking borders. Each side of surface to have tab-guide cable system for even lateral tension and flat surface. Bottom of surface supported and masked by black extruded aluminum dowel weighted to apply proper vertical tension. Viewing surface mildew resistant. Bottom of viewing surface enclosed in dowel; dowel to disappear inside case when retracted. Top of surface masked by 12″ black drop.

Silhouette/Series E: Viewing surface of (fiberglass matt white/glass beaded/optional High Contrast Grey/optional AT1200/optional AT Grey), flame and mildew resistant. Bottom of viewing surface enclosed in dowel; dowel to disappear inside case when retracted. 3-position control switch (or switches-specify number) to stop or reverse screen at any point. Switch(es) furnished with cover plate. Electrically operated 110-120v. ac, 60 Hz. 3-wire motor mounted inside screen roller, instantly reversible, lifetime lubricated, with thermal overload protector and electric brake. Preset, accessible limit switches. Roller of 2″ dia. metal. 3-position control switch (or switches-specify number) to stop or reverse screen at any point. Switch(es) furnished with cover plate. Entire unit certified by Underwriters' Laboratories, Inc., for the U.S. and Canada.

Silhouette/Series M: Viewing surface flame and mildew resistant. Viewing surface of (fiberglass matt white/glass beaded/optional High Contrast Grey), mounted to one-piece rigid steel roller. Bottom of viewing surface enclosed in dowel; dowel to disappear inside case when retracted.

Silhouette/Series C: Viewing surface mildew resistant. Bottom of viewing surface enclosed in dowel; dowel to disappear inside case when retracted. Viewing surface (M1300/M2500/HiDef Grey/optional Cineflex), with black masking borders. Each side of surface to have tab-guide cable system for even lateral tension and flat surface. Bottom of surface supported and masked by black extruded aluminum dowel weighted to apply proper vertical tension. Operated by detachable polished aluminum crank.

Entire unit patented by Draper, Inc. U.S. Patent No. 6,111,694 and 5,296,964.

Carmel Public Library, Carmel, IN

Premier/Series C

Crank-Operated Screen with Tab Tensioning System

Premier/Series C—The manually operated screen with a perfectly flat viewing surface. Its Tab Tensioning System delivers a perfect picture quality and meets the exacting requirements of large-screen video and data projection. Operated by a slim, polished aluminum crank, which may be detached for storage. Steel case and special tensioning dowel are finished in flat black. Your choice of M1300, M2500, HiDef Grey or Cineflex rear projection viewing surface.

System Options

- ***Extra Drop***—12″ black drop at top of screen is now standard on Tab-Tensioned screens. Additional drop optional, either white or black (white is standard). Extra drop will increase the overall length of the case.
- ***Black Masking Borders***—Standard for all formats.
- ***Projected Mounting Brackets***—provides a 6″ clearance.
- ***Control Options***—Detachable crank is standard.

Dimensions & Data

The Premier/Series C is available in all the same sizes and viewing surfaces as the Premier (see page 17). Additionally, the case dimensions and installation parameters are the same as those shown in the drawings on page 17.

Specifications—Premier/Series C

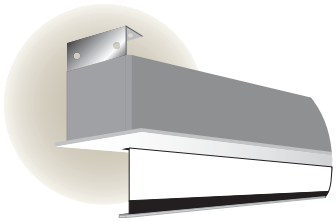
_____Projection screens, size_____h. x_____w., 3″ dia. metal roller

Viewing surface of (M1300/M2500/HiDef Grey/optional Cineflex), mildew resistant, with black masking borders. Each side of surface to have tab-guide cable system to maintain even lateral tension and hold surface flat. Bottom of surface supported and masked by black, extruded aluminum dowel weighted to apply proper vertical tension. Top of surface masked by 12″ black drop.

Case of one piece 22 ga. steel with flat back design and embossed, baked-on black plastisol finish. Endcaps of 12 ga. black finished steel fully enclosing roller ends and forming universal (wall or suspended) hanging brackets. Operated by detachable polished aluminum crank.

Apex

The first spring-roller screen with automatic ceiling closure



The Apex is the first manually operated screen expressly designed for concealed installation. Extruded aluminum case installs above the ceiling.

The Apex features a white closure panel at the bottom of the screen surface which seals the ceiling opening when the screen is retracted. Trim flange surrounds the perimeter of the screen case to finish the installation, whether in a suspended or drywall ceiling. Bottom of case and closure are finished in ceiling white.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey.

System Options

- ***Extra Drop***—Up to 8′ overall height, either white or black (white is standard in AV format; black for all other formats).
- ***Black Masking Borders***—Borders are optional for Apex in AV format. They are standard for all other formats.
- ***Control Options***—Aluminum operating pole is furnished in one of two sizes: 4′ and 6′ as required.

Dimensions & Data—Apex

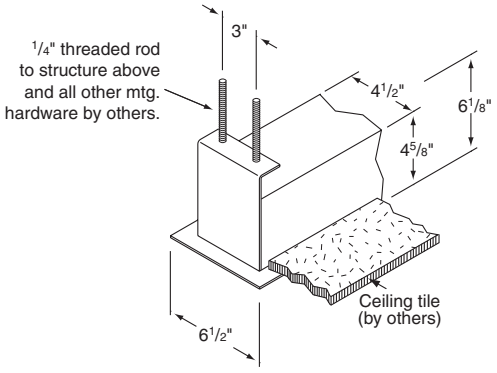
Viewing Surface	Case Length	Net Wt. (lbs.)	Viewing Surface	Case Length	Net Wt. (lbs.)
50″ x 50″	4′5½″	25	84″ x 84″	7′3½″	40
60″ x 60″	5′3½″	29	72″ x 96″	8′4″	50
70″ x 70″	6′1½″	35	96″ x 96″	8′4″	53

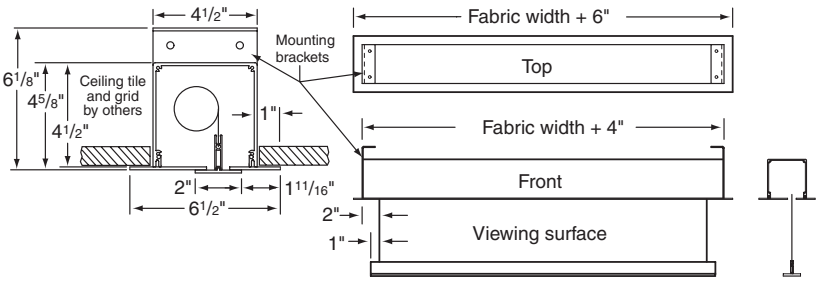
NTSC Video Format

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
6′	42″ x 56½″	46½″ x 59½″	5′3½″	29
7′	50″ x 66½″	53½″ x 69½″	6′1½″	35
100″	60″ x 80″	64″ x 83½″	7′3½″	40
10′	69″ x 92″	73″ x 96″	8′4″	50

Case Dimensions/Method of Installation

The bottom cover includes a flange to finish the ceiling opening. Add 2″ to case lengths in chart at right for overall length including this trim.





Specifications—Apex

_____Projection screens, size_____h. x_____w., for recessed ceiling mounting. Case of custom "U" shaped extruded aluminum, 6063-T5 alloy, 4½″ x 4½″ x ⅛″ wall, mill finish. Endcaps of stamped 1018 steel, 6″ high x 4½″ wide x ⅛″ thick, with integral mounting surface for suspended installation, finished light grey.

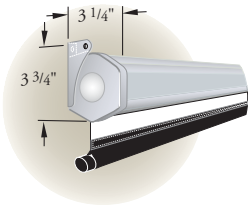
Roller to be institutional quality, 1¾″ diameter steel, one-piece construction with heavy duty spring and steel endcaps. Roller mounting brackets of stamped 1018 steel, zinc plated and mounted to endcap bracket with rivets. Bottom cover to be flat shaped extruded 6063-T5 aluminum with white finish. Closure panel to be tee shaped, extruded 6063-T5 aluminum with white finish, and to fit against bottom cover leaving no opening when screen is retracted. Small slots provided in bottom of closure to accept pull down handle.

Viewing surface of (fiberglass matt white/glass beaded/optional High Contrast Grey), flame and mildew resistant. Fabric securely attached to metal roller. Bottom of viewing surface securely attached to closure. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Pull down handle to be of clear anodized aluminum, with a zinc plated steel hook at one end (48″ or 72″ long).

Luma

Spring-Roller Projection Screen for the Classroom



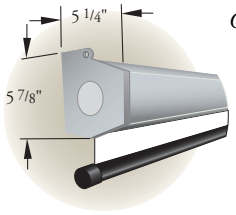
The Luma projection screen is attractive and dependable in the classroom or conference room. Its case and endcaps have a matching finish. Heavy gauge endcaps form universal hanging brackets for attachment to wall, ceiling or map rail hooks.

Your choice of a conventional viewing surface: fiberglass matt white, glass beaded or High Contrast Grey. For all sizes 70″ wide and larger, or any size shipping with wall extension brackets, a pull cord is factory attached.

Fairview South Elementary School, Skokie, IL. Photography by Barry Rustin, Glenview, IL.

Luma 2

Heavy Duty Spring Roller Projection Screen



The Luma 2 is an attractive and practical choice wherever a large spring-roller screen is required. Simple in design and rugged in construction, the Luma 2 is housed in a white steel case with matching heavy-gauge endcaps.

Fiberglass matt white, glass beaded or High Contrast Grey viewing surfaces available.

Dimensions & Data—Luma 2

Viewing Surface HxW	Case Length	Net Wt. (lbs.)	Viewing Surface HxW	Case Length	Net Wt. (lbs.)
50″ x 50″	4′5½″	23	7′ x 9′	9′3¼″	37
60″ x 60″	5′3½″	26	9′ x 9′	9′3¼″	42
70″ x 70″	6′1½″	29	8′ x 10′	10′3¼″	41
84″ x 84″	7′3½″	32	10′ x 10′	10′3¼″	47
72″ x 96″	8′2⅜″	32	9′ x 12′	12′3¼″	55
96″ x 96″	8′2⅜″	34	12′ x 12′	12′3¼″	66

NTSC Video Format Sizes

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
100″	60″ x 80″	64″ x 83½″	7′3½″	32
10′	69″ x 92″	73″ x 96″	8′2⅜″	32
11′	78″ x 104″	83″ x 108″	9′3¼″	36
150″	87″ x 116″	92″ x 120″	10′3¼″	41
15′	105″ x 140″	109″ x 144″	12′3¼″	55

Case size—5³⁄₁₆″ H x 5¼″ W. Brackets extend ⅝″ above case.

Dimensions & Data—Luma

Viewing Surface HxW	Case Length	Net Wt. (lbs.)	Viewing Surface HxW	Case Length	Net Wt. (lbs.)
50″ x 50″	53″	9	84″ x 84″	87″	22
60″ x 60″	63″	12	72″ x 96″	99″	23
70″ x 70″	73″	15	96″ x 96″	99″	24

Nominal Diagonal	Viewing Area	Overall Size	Case Length	Net Wt. (lbs.)
6′	42½″ x 56½″	46½″ x 59½″	63″	12
7′	50″ x 66½″	53½″ x 69½″	73″	15
100″	60″ x 80″	64″ x 83½″	87″	22
10′	69″ x 92″	73″ x 96″	99″	23

Case size—3¼″ H x 3¼″ W. Brackets extend ½″ above case.

System Options for Luma and Luma 2

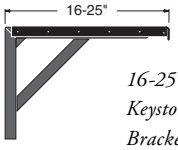
- ***Extra Drop***—Maximum total screen height of 8′ for Luma, 12′ for Luma 2. White or black; white standard on AV format screens, black on all others.
- ***Black Masking Borders***—Available on AV format screens: 1½″ wide in sizes through 70″ x 70″; 2″ wide in larger sizes. All other format screens have black borders to frame image on all four sides.
- ***Projected Mounting Brackets***—Heavy gauge angle steel brackets with choice of black (standard) or white epoxy powdercoat finish.

Specifications—Luma & Luma 2

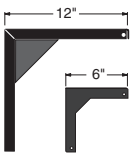
_____Projection screens, size_____h. x_____w., wall/ceiling mounting. Case of 22 ga. steel, flat back design, with baked-on plastisol finish in white. Friction-free closure. Viewing surface of (fiberglass matt white/glass beaded/optional High Contrast Grey), flame and mildew resistant. Note: Matt white and glass beaded surfaces up to 10′ high will be seamless.

Luma—Endcaps finished to match case, with integral roller brackets, concealing roller ends. With matching universal mounting brackets. Fabric securely attached to one-piece rigid steel roller. Bottom of viewing surface securely mounted on tubular steel slat, with ends protected by vinyl caps. Saddle and pull attached to slat by screws.

Luma 2—Endcaps, finished to match case, to have integral roller brackets. Endcaps to form universal mounting brackets. Viewing surface mounted on a 3″ dia. rigid steel roller. Bottom of viewing surface securely mounted on 1½″ dia. tubular steel slat. Saddle and pull attached to slat by screws. Ends of slat protected by vinyl caps.

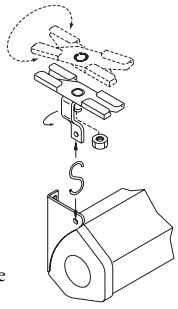


16-25″ Adjustable Keystone Eliminator Brackets for Luma 2 through 8′ wide and all Luma sizes.



12″ Wall Brackets for Luma 2 through 8″ wide and all Luma sizes.

6″ Wall Brackets for all Luma 2 and Luma sizes.



T-Bar Twist Clips. Mount directly to T-irons supporting suspended ceilings. For Luma sizes through 70″ x 70″.

Onyx

It's so simple.

NEW

You can have a beautifully framed image hanging on the wall in just 10 to 15 minutes—assembly is that easy!

An attractive frame and a radical new fabric tensioning system make Onyx the leader in permanently tensioned screens. The 4″ wide beveled, extruded aluminum frame interconnects on site with one simple hand tool that Draper provides. Each side piece slipfits tightly to injection molded plastic corners, forming perfectly mitered edges.

A radical new approach to fabric attachment will amaze even the toughest of critics. There are no snaps! Uniform tension is applied to the entire surface area, so the surface is perfectly flat. Unique fabric retention system enables you to adjust the surface tension (up to 1½″) in just seconds, without tools!

Jillian's, Universal City, CA. Installed by Guy O'Hazza. *Patent pending.*

System Options

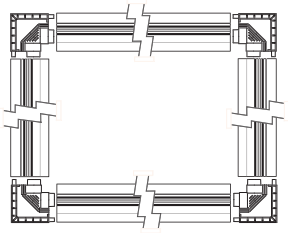
• ***Viewing Surfaces***—M1300, M2500, HiDef Grey, acoustically transparent AT1200 or AT Grey for front projection or Cineflex rear projection vinyl.

• ***Custom Sizes***—Any size up to the maximum standard size in chart.

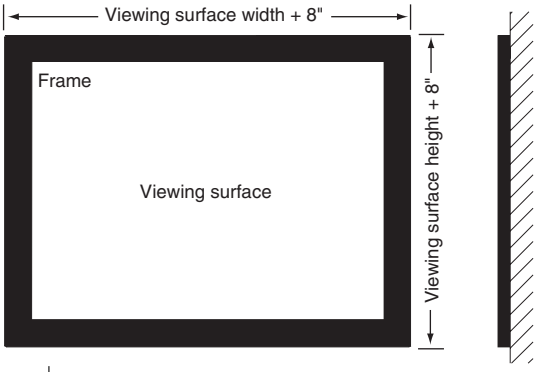
• ***Frame Finishes***—Black aluminum is standard, white is available. Add optional velvety black textile, Vel-Tex, to eliminate reflections.

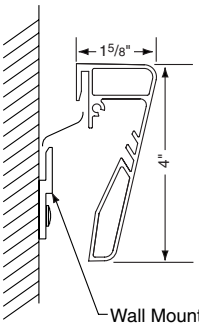
• ***Mounting***—Permanent wall mount (brackets included).

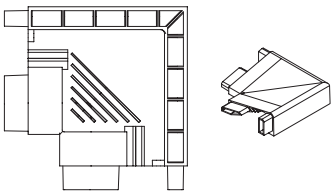
Onyx frame details—Rear view



Dimensions/Method of Installation







Injection molded plastic corners form perfectly mitered edges.

Dimensions & Data—Onyx

	Viewing Area H x W	Overall Size H x W	Net Wt.	M1300	M2500	HiDef Grey	AT1200/AT Grey	Cineflex
AV Format	50″ x 50″	58″ x 58″	27	■	■	■	■	■
	60″ x 60″	68″ x 68″	32	■	■	■	■	■
	70″ x 70″	78″ x 78″	37	■	■	■	■	■
	84″ x 84″	92″ x 92″	44	■	■	■	■	■
	96″ x 96″	104″ x 104″	50	■	■	■	■	■
	9′ x 9′	116″ x 116″	56	■	■			■
	10′ x 10′	128″ x 128″	63	■	■			■
Nominal Diagonal	**Viewing Area H x W**	**Overall Size H x W**	**Net Wt.**					
NTSC Format (4:3)								
6′	43″ x 57″	51″ x 65″	27	■	■	■	■	■
6½′	47″ x 63″	55″ x 71″	30	■	■	■	■	■
7′	50″ x 67″	58″ x 75″	31	■	■	■	■	■
7½′	54″ x 72″	62″ x 80″	33	■	■	■	■	■
100″	60″ x 80″	68″ x 88″	37	■	■	■	■	■
10′	72″ x 96″	78″ x 102″	43	■	■	■	■	■
150″	90″ x 120″	98″ x 128″	54	■	■	■	■	■
15′	108″ x 144″	116″ x 152″	66	■	■	■	■	■

HDTV and WideScreen formats available.

Specifications—Onyx

_____ Onyx projection screens, size_____h. x _____w. (viewing area), designed for wall mounting.

Extruded aluminum trim frame with injection molded corners forms 4″ border on all four sides. Trim frame finished black; optional black Vel-Tex textile covering is also available. Viewing surface to be (M1300/M2500/HiDef Grey/optional AT1200/optional AT Grey/optional Cineflex rear projection). Viewing surfaces to have ¾″ hem pocket on all four sides to accept screen insertion tubing. Surface attaches to extruded trim frame using extruded plastic strip; snap attachment not acceptable as equivalent.

Frame extrusions shall provide for up to 1½″ of horizontal and vertical surface tension adjustability in ⅜″. Trim frame equipped with mounting flange that mates with wall brackets. Available in custom sizes up to 20′ x 20′ viewing area.

Clarion

Projection Perfection

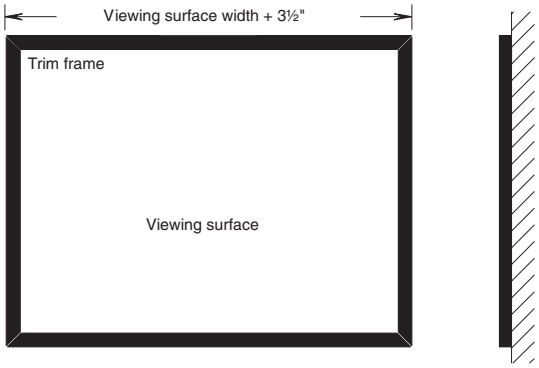
Improve your image—with a Clarion projection screen. How? The viewing surface is *perfectly flat*. And a perfectly flat viewing surface means *perfect picture quality*. The Clarion's viewing surface is stretched tightly over a self-concealing aluminum frame, which also forms an attractive border, for a clean, theatre-like appearance.

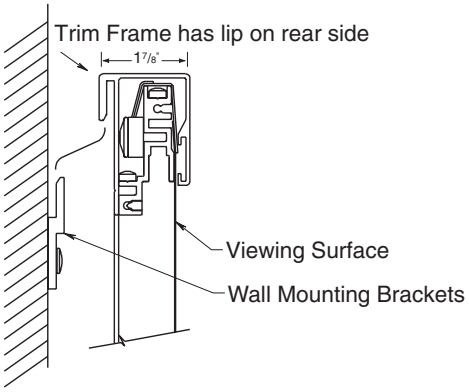
System Options

- ***Viewing Surfaces***—M1300, M2500, HiDef Grey, glass beaded, AT1200 or AT Grey.
- ***Custom Sizes***—Any size up to the maximum standard size in the chart below at right. Overall size, including frame, equals image area plus 3½″.
- ***Frame Finishes***—Black acrylic is standard. Also available with velvety black Vel–Tex to eliminate reflections on the frame.
- ***Black Masking Borders***—The frame serves as the border in all formats.
- ***Mounting***—Permanent wall mount (brackets included).

Earlham College, Richmond, Indiana. Installation by MCSi, Indianapolis.

Dimensions/Method of Installation





Dimensions & Data—Clarion

	Viewing Area H x W	Overall Size H x W	Net Wt. (lbs.)	M1300	M2500	HiDef Grey	AT1200/AT Grey	Glass Beaded
AV Format	50″ x 50″	53½″ x 53½″	31	■	■	■	■	■
	60″ x 60″	63½″ x 63½″	39					
	70″ x 70″	73½″ x 73½″	48					
	84″ x 84″	87½″ x 87½″	55					
	96″ x 96″	99½″ x 99½″	63					
	9′ x 9′	111½″ x 111½″	71					
	10′ x 10′	123½″ x 123½″	79					
Nominal Diagonal	Viewing Area H x W	Overall Size H x W	Net Wt. (lbs.)					
NTSC Format (4:3)								
6′	43″ x 57″	46½″ x 60½″	35	■	■	■	■	■
6½′	47″ x 63″	50½″ x 66½″	37					
7′	50″ x 67″	53½″ x 70½″	38					
7½′	54″ x 72″	57½″ x 75½″	42					
100″	60″ x 80″	63½″ x 83½″	47					
10′	72″ x 96″	75½″ x 99½″	55					
150″	90″ x 120″	93½″ x 123½″	72					
15′	108″ x 144″	111½″ x 147½″	80					

HDTV and WideScreen formats available.

Specifications—Clarion

_____Projection screens, size_____h. x_____w. (overall size), designed for permanent wall mounting. Extruded aluminum base frame, equipped with snaps set on 6″ centers. Extruded aluminum trim frame forms 1¾″ border. Trim frame finished with (select: matt black thermosetting acrylic/optional black Vel-Tex textile covering).

Viewing surface to be seamless (select: M1300/M2500/HiDef Grey/glass beaded/optional AT1200/optional At Grey). Viewing surfaces to have reinforced black webbing on all four sides with snaps to fit base frame. Webbing completely concealed by trim frame. Trim frame equipped with mounting flange that mates with wall brackets.

ShadowBox Clarion

ShadowBox Clarion screens are constructed with a viewing surface that snaps onto the back side of a 1½″ extruded aluminum frame with a black powdercoat finish. The assembled unit features a perfectly flat viewing surface with a clean, finished appearance.

System Options

- ***Viewing Surfaces***—M1300, M2500, HiDef Grey, AT1200 or AT Grey for front projection, or Cineflex rear projection vinyl.
- ***Standard and Custom sizes***—Same viewing area as Clarion. Overall size, including frame, equals image area plus 3″. Any size up to the maximum standard size in the chart on page 25.
- ***Frame Finishes***—Black aluminum (standard). Frame may be covered with velvety black Vel–Tex to eliminate reflections on the frame.
- ***Black Masking Borders***—Frame serves as the border in all formats.
- ***Mounting***—Permanent wall mount (brackets included).

WrapAround Clarion

With a WrapAround Clarion, the viewing surface wraps completely around the perimeter frame and attaches to the back side, so the screen is solid white—and perfectly flat—with no visible frame or border. Ideal for any application where the screen must be perfectly unobtrusive.

System Options

- ***Viewing Surfaces***—M1300, M2500 or HiDef Grey.
- ***Standard and Custom Sizes***—Available in any size up to the largest standard size shown in the chart for the Clarion on page 25. Viewing area will match the overall size.
- ***Frame and borders***—No frame or borders are visible since the surface wraps completely around the frame.
- ***Mounting***—Permanent wall mount (brackets included) or wall mount with an optional manual or motorized tilt feature.

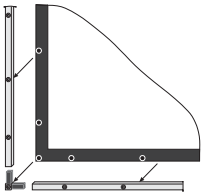
Specifications—ShadowBox Clarion

_____Projection screens, size_____h. x_____w. (overall size), designed for permanent wall mounting. To have extruded aluminum base frame, equipped with snaps set on 6″ centers and finished in black. Viewing surface shall attach to rear side of frame, for shadow box appearance. Viewing surface to be seamless (M1300/M2500/HiDef Grey/optional Cineflex). Viewing surfaces to have reinforced black webbing on all four sides with snaps to fit base frame. Webbing completely concealed behind frame. Frame equipped with mounting flange that mates with wall brackets.

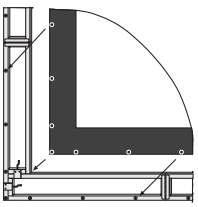
Specifications—WrapAround Clarion

_____Projection screens, size_____h. x_____w. (overall size), designed for permanent wall mounting. To have extruded aluminum base frame, equipped with snaps set on 6″ centers. Viewing surface shall wrap around frame, concealing it completely, and attach to rear side. Viewing surface shall be (select: M1300/M2500/HiDef Grey). Viewing surfaces to have reinforced black webbing on all four sides with snaps to fit base frame. Webbing completely concealed behind frame. Frame equipped with mounting flange that mates with wall brackets.

Cineperm



Standard Construction



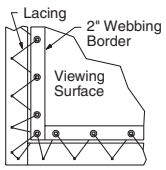
Truss-Style Construction
(very large sizes only)

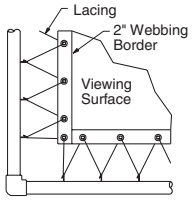
Snap-on Screen with Aluminum Frame

The Cineperm offers a contemporary, theatre-like appearance wherever a permanently mounted front or rear screen is required. Flexible viewing surface is stretched perfectly flat and snaps onto a 1″ tubular aluminum frame. The viewing surface conceals the frame completely with 2″ black leatherette borders on all sides. Pull handles at each corner of the surface help stretch the fabric during attachment and can be removed after snapping surface onto frame. Suitable for mounting to a wall, suspending from a ceiling or "flying" for theatrical uses.

Lace & Grommet

Wood Frame—Front Laced





Aluminum Frame—Inside Laced

Ideal for theatres and auditoriums

Draper Lace & Grommet screens are furnished with 2″ reinforced webbing on all four sides and grommets on 6″ centers. Every Lace & Grommet screen is custom built to your order—sizes up to 30′ x 90′. Ideal for theatres, auditoriums, and stage events.

System Options

- ***Viewing Surfaces***—For front projection, flexible matt white is the standard viewing surface. Fiberglass matt white, glass beaded, pearlescent, silver aluminized, M1300, M2500 and HiDef Grey are also available. For rear projection, choose Cineflex vinyl.

Specifications—Cineperm

_____Cineperm projection screens, size_____h. x _____w. overall dimension to include 2″ border. Permanent mounting type. Snap button style projection surface with 2″ reinforced black webbing on all 4 sides, snaps set on 6″ centers. Complete with 1″ square tubular aluminum frame equipped with snaps to fit surface. Projection surface of (M1300/M2500/HiDef Grey/optional AT1200/optional AT Grey/optional Cineflex rear projection).

Truss Style Construction (Large sizes only): As above, except surface shall have 6″ reinforced black webbing borders, and frame shall consist of 1″ square tubular aluminum welded and reinforced in a 6″ wide double truss.

Specifications—Lace & Grommet

_____Lace & Grommet screens, size_____h. x _____w., (up to 30′ x 90′) overall dimension, including webbing. Viewing surface to have 2¼″ reinforced webbing borders around 4 sides of viewing area, with grommets on 6″ centers.

Viewing surface to be: (fiberglass matt white/glass beaded/M1300/pearlescent/HiDef Grey/optional Cineflex/silver aluminized).

Options: Suspended or wall-mounted frames available in wood, aluminum, or steel as required. Springs available instead of lacing with steel frame.

Lifts & Mounts for Video Projectors, Plasma Displays and Flat Panel Displays

Draper offers the most sophisticated, comprehensive and functional line of lifts and mounts for video projectors and plasma displays. Five different models of motorized video projector lifts are designed to help you mount the projector of your choice at or above the ceiling line. Aero Mounts enable ceiling installation of LCD/DLP projectors and wall or ceiling installation of plasma displays. All have built-in adjustability.

- ***Revelation***—This unique projector mount permanently conceals the projector above the ceiling—and hides its noise as well. Page 28.
- ***Micro Projector Lift***—Designed for today's smaller projectors, yet packs powerful features. Lowers the projector up to 4′ with compact scissor mechanism. Page 29.
- ***Scissor Lift***—The projector can be lowered as much as 17′ from its stored position. Page 30.
- ***LCD Lift***—Compact projector lift with bomb bay door closure. Page 31.
- ***Aero Lift 25***—Draper's new projector lift has the smallest footprint and height of any video projector lift. Page 31.
- ***Aero Plasma Lift***—The most compact plasma display lift on the market. Page 32.
- ***Aero Universal Projector Bracket***—Solves the projector bracket problem. Fits virtually any LCD/DLP projector. Page 33.
- ***Aero Mounts for LCD/DLP Projectors***—These ceiling mounts are attractive and installer-friendly. Pages 33-34.
- ***Aero Accuset Projector Mounts***—New LCD/DLP ceiling projector mounts address almost any installation. Pages 35-36.
- ***Aero Mounts for Plasma Displays***—Sleek mounts put plasma monitors exactly where you want them—ceiling or wall mount, with plenty of flexibility. Pages 37-39.
- ***Aero Universal Plasma Bracket***—New plasma bracket fits a variety of plasma displays. Page 37.
- ***Aero Mounts for Flat Panel Displays***—Attractive mounts suspend LCD flat panel displays from ceiling or wall. Pages 40-41.
- ***VideoConferencing Camera Box***—Hides videoconferencing camera in the wall when not in use. Page 41.

Controls for Video Projector Lifts

Single Station Control—Standard with all Draper video projector lifts. One 3-position rocker switch: 115v for LCD Lift and Micro Projector Lift, 24v or 12v for Revelation; one 3-position 12v toggle switch for Scissor Lift (with momentary key switch for service position). Switch operation is maintained contact. Complete with stainless steel cover plate. UL listed.

12v, 24v or 115v single station control

Standard switch for Scissor Lift

Low Voltage Multiple Station Controls—Install switches everywhere they're needed; add wireless transmitter (below) or interface with a master control system. Three-button switches have neutral decorator face plates for flush wall mounting. Optional for all Draper video projector lifts. Wiring from control unit to switches is lightweight for 24v current.

Switch for low voltage multiple station control

Wireless Remote Control—Enables you to operate a Draper video projector lift—and electric screen if you wish—from anywhere in the room. For use only with Draper low-voltage control unit, with or without wall switches. Infrared and radio frequency controls available.

IR Remote Control

RF Remote Control

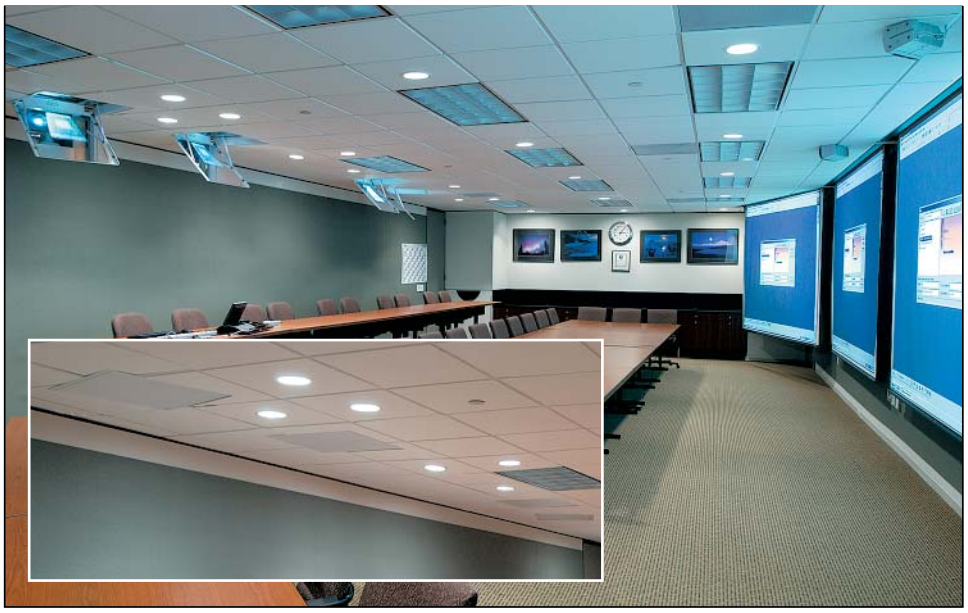
Key Operated Power Supply Switch—Useful with *any* control system for a Draper projector lift—low voltage or 115v. Switch mounts next to operating switch and controls power to it.

Video Interface Control/Ceiling-Recessed Video System—Operate a Draper video projector lift in tandem with a Draper motorized projection screen using the Video Interface Control. The Video Interface Control replaces the screen's switch; for the projector lift, use the standard switch or any control described above. Touch the switch—or wireless remote control—and the video projector lift begins to descend. When it stops, the projection screen descends. At the end of the presentation, flip the switch and the lift and screen will rise automatically.

VIC-6 or VIC-12

VIC-15

Revelation



U.S. Patent No. 6,379,012

You won't see or hear the projector

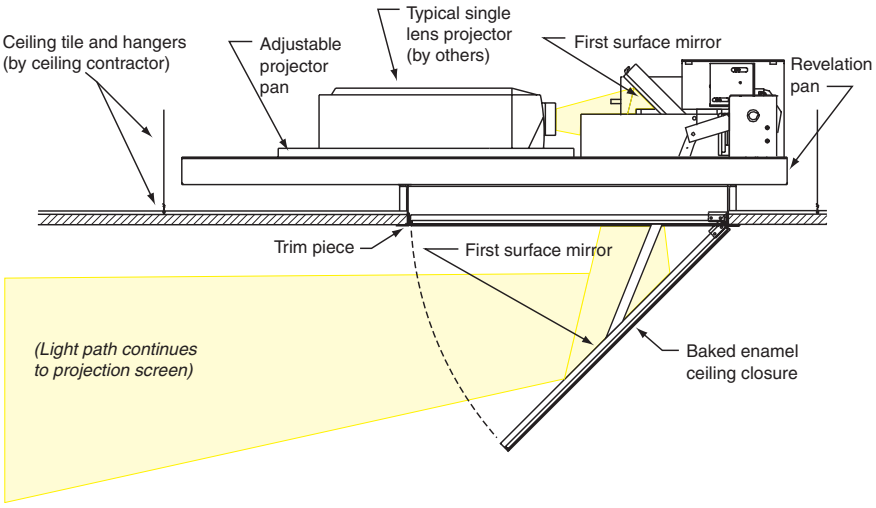
The Revelation is totally different from traditional projector lifts and mounts. *They* typically lower the projector into the room from a ceiling recess, or lift it into the seating area from a table hideaway. The Revelation projector mount hides the projector—and its noise—above the ceiling all the time.

You'll be astonished by what you see—and don't see—*and don't hear*—when your projector is mounted in a Revelation. You won't see or hear the projector—not before, during or after the show. You'll only see a hinged door in the ceiling. Also provides security for projector since it is always above the ceiling.

Now available in two models: Revelation A needs only 13⅝″ of space above the ceiling, and Revelation B needs only 18″.

The Revelation's highly reflective dual first surface mirror system delivers a perfect picture to your screen at the touch of a switch or wireless controller. The Revelation and all Draper motorized screens are compatible with your master control system.

Combine the Revelation with a ceiling-recessed Draper projection screen, and take your projection showmanship to a new level. The Revelation A and Revelation B are compatible with a wide variety of LCD/DLP projectors.


Ceiling tile and hangers (by ceiling contractor)
Adjustable projector pan
Typical single lens projector (by others)
First surface mirror
Revelation pan
Trim piece
First surface mirror
(Light path continues to projection screen)
Baked enamel ceiling closure

System Options

- ***Plenum Enclosure***—Aluminum enclosure for use in return air plenum. Includes couplers for connection to ventilation ducts.
- ***Access Door***—A hinged access door in the ceiling is a good option when access to the projector from above the ceiling is not convenient. Choose a flat metal door or one made to accept ceiling tile.
- ***Glass Shield***—Made of anti-reflective glass and installed between the Revelation and the first surface mirror/ceiling closure. The Shield serves two valuable purposes: it reduces projector noise in the audience area by an additional 80%, and it prevents cigarette smoke, grease or other harmful substances from reaching the projector. Virtually none of the projected light is lost as it passes through the Shield.
- ***Control Options***—Refer to page 27.

Revelation Dimensions & Data	Model A	Model B
Overall Unit Size (HWL)	2″ x 38¼″ x 34″	2″ x 38¼″ x 44″
Required Space Above Ceiling*	13⅝″ x 38¼″ x 34″	18″ x 38¼″ x 44″
Clearance Below Ceiling	approx. 17″	approx. 17″
Rough Ceiling Opening	24¹¹⁄₁₆″ x 24¹¹⁄₁₆″	24¹¹⁄₁₆″ x 24¹¹⁄₁₆″
Capacity	100 lbs.	100 lbs.
Door's Downward Travel Distance	approx. 17″	approx. 17″
Travel Time	9 sec.	9 sec.
Net Weight	85 lbs.	90 lbs.
Projector Space (HWL)—To fit within parameters of inner pan. Request a planning sheet.		

* Includes allowance for housing in plenum (13″ *without* plenum).

Specifications—Revelation

_____Revelation video projector mount (Model A/Model B) for single lens projectors weighing up to 100 lbs. Projector to rest in an aluminum pan to be mounted permanently above the ceiling. Model A pan size 13⅜″ high x 38¼″ long x 34″ wide. Model B pan size 18″ high x 38¼″ long x 44″ wide.

From room side, only visible part to be operating door finished in ceiling white baked enamel, installed to match a 24″ x 24″ ceiling grid spacing. Door to lower smoothly into audience room to preset point: at a 45° angle to the ceiling—a vertical distance of 17″. Factory set limit switches to automatically stop door travel at open and closed positions.

Door to be electrically operated 60 Hz., 110-220v ac. Motor to be UL recognized and CE rated, instantly reversible, thermally protected and lifetime lubricated. Door to contain first surface optical grade 10 mm glass mirror, 94% reflective. A second identical mirror to be mounted in pan above ceiling. Mirrors to work in tandem to reflect projected light onto a wall or ceiling-mounted Draper front projection screen.

Unit's electrical box to include one, constantly energized, 60Hz., 110-220v ac. fused duplex outlet. Unit to be furnished with knockouts for cable passages. 3-position 12v control switch to stop or reverse cycle at any point. U.S. Patent No. 6,379,012.

Optional Equipment: Plenum Enclosure—Housing of aluminum suitable for use in return air plenum. Housing to have intake and exhaust fan system with couplers for connection to remote ventilation ducting. Access Door—When unit is installed above a hard ceiling and access to the projector from above is not convenient, an access door in the ceiling is available in two styles: one to accept ceiling material and the other, a flat pan. Revelation Shield—Anti-reflective glass covers opening to reduce noise and completely isolate the projector (when used with optional plenum).

Micro Projector Lift

Designed for today's smaller projectors

The Micro Projector Lift (MPL) is small and convenient, just like the projectors it is designed to accommodate. Weighing only 35 pounds, it can be installed in an existing 2′ x 2′ ceiling opening without disturbing framework.

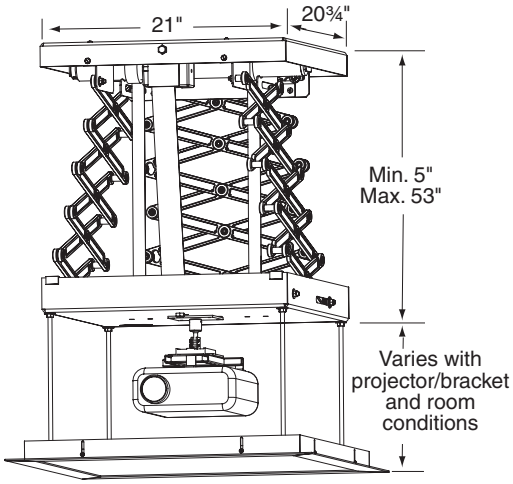
All components can be serviced from below the unit. The projector's "show" position can be set at any point with infinite adjustability, up to 48″ extension.

The Micro Projector Lift utilizes the same exclusive 3-scissor design as Draper's popular Scissor Lift (see page 30), but features a compact side-folding scissor. The load is lifted by two 1″ wide Kevlar straps. Safety belt provides extra protection.

Closed height of lifting unit is only 5″ tall (not including projector, mounting mechanism or closure), so a minimal amount of overhead ceiling space is required.

System Options

- ***Ceiling closure panel***—Universal steel ceiling closure with white baked enamel can also accept ceiling tile.
- ***Plenum housing***—Height varies according to choice of projector. Includes ceiling trim ring. Does not include ceiling closure panel.
- ***Ceiling finish kit***—Ceiling closure panel and ceiling trim ring to finish ceiling opening.
- ***Projector mounting bracket***—The Aero Low Profile Lift Bracket is described on page 34. Projector may also be mounted flush to bottom pan.
- ***Factory installed cables*** for RGB, Video and Control.
- ***Access door***—A hinged access door in the ceiling for when access to the projector from above the ceiling is not convenient.
- ***Controls***—Described on page 27.



U.S. Patent No. D395,909. Other patents pending.

Dimensions & Data—Micro Projector Lift

Height of lift in closed position [1]	5″
Overall lift dimensions (WxL)	21″ x 20¾″
Ceiling opening	2′ x 2′
Optional plenum housing (WxL) [2]	23½″ x 23½″
Max. projector size (WxL) [3]	20″ x 20″
Max. down travel	4′
Approx. travel time to lowest position	27 sec.
Capacity	35 lbs.
Capacity with Aero Low Profile Mount	26 lbs.
Net weight of lift	35 lbs.
Amperes [4]	1.2

[1] Not including projector, mount/bracket or closure. Optional Aero Low Profile Lift Bracket adds to unit height (including Aero Universal Projector Bracket).

[2] Max. Plenum Height: 20⅝″. Min. Plenum Height: 12⅝″

[3] Max. Available Projector/Bracket Height (with Plenum): 13½″
Min. Available Projector/Bracket Height (with Plenum): 5½″

[4] Does not include any load placed on MPL's pre-wired power cable.

Specifications—Micro Projector Lift

_____MPL video projector lifts, for projectors weighing up to 35 lbs. Dove grey baked powdercoat finish. Projector bolts to operating pan or mounts to pan with optional Draper Aero Low Profile Lift Bracket. Electrically operated 110-120v ac, 60 Hz. 3-wire motor, instantly reversible, lifetime lubricated, with internal thermal overload protector and electric brake. Preset, accessible limit switches to adjust up and down stopping positions. Projector to be suspended from 2¾″ x 20″ x 20″ x ⅛″ thick aluminum pan, which is stabilized by 3 sets of scissors and operated by two, 1″ wide Kevlar belts. Lift equipped with scissors on the left, right and rear. Scissor arms of nylon reinforced with long glass fibers. Scissor folding mechanism designed for tight stacking, with closed height not to exceed 5″ (not including projector, projector mount/bracket or ceiling closure). Also equipped with fail-safe inertial safety belt system and Cable Management System for projector power cord. Ceiling closure, finished in white baked enamel or recessed to accept ceiling tile, shall descend smoothly with projector. Trim kit, when required, shall finish ceiling edges.

U. S. Patent No. D395,909. Other patents pending.

Options (select as needed): Plenum housing of aluminum and steel for use in return air plenum. Optional factory-installed control cables available.

See specifications for optional Aero Low Profile Lift Bracket.

Please Note: Micro Projector Lift should be specified in conjunction with a Draper, Inc. video format motorized screen.

Scissor Lift—SL & SLX Series

The lift with "store, show and service" positions

Draper's Scissor Lift will retract your projector to ceiling level or above, then lower it to the exact projection and service positions you require. Draper factory sets all three positions—"store", "show" and "service"—to your specifications, and adjustments are easy after installation.

Scissors on the left, right and back sides of the unit stabilize the projector from any sway both laterally and front–to–back.

Scissor Lift features a small footprint: 23″ wide and 23½″ deep.

Projectors can be bolted directly to the lift's bottom pan, or mounted with the optional Aero Low Profile Lift Bracket (see page 34). The movement of the pan is driven by a gearmotor with a powerful, reliable metal chain drive system. Each lift is equipped with a fail safe inertial safety belt system, and a Cable Management System that includes a pre-wired power cable on the back scissor, bringing 110v current right to your projector.

Operation is 115v; switching is 12v. Lifting capacity is a full 350 lbs.

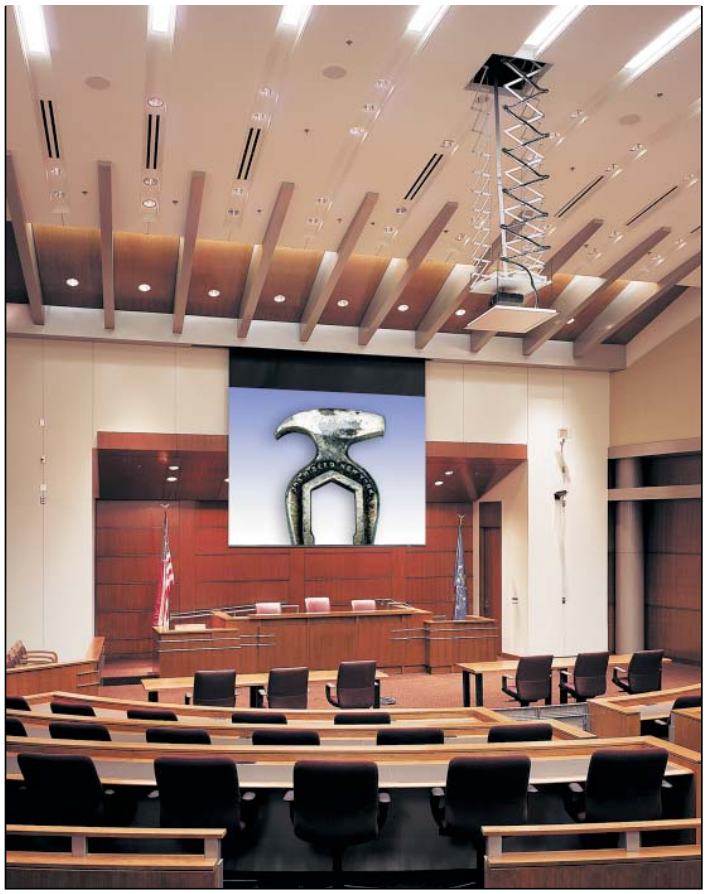
Lowers projector up to 17′

Seven Scissor Lift SLX models offer "service" positions of up to 17′. A slightly larger footprint allows for the extended travel with no loss of stability. See chart below for dimensions.

System Options for SL & SLX Series Scissor Lifts

- ***Ceiling closure (WxL)***—Universal steel ceiling closure, with a recess to accept ceiling tile, or with a smooth surface finished in white baked enamel. Select size: B–30⅝″ x 30⅝″ (only available on SL Series); S–30⅛″ x 32⅝″; E–30⅛″ x 40⅝″; J–30⅛″ x 44⅝″; G–36⅛″ x 49⅝″; U–38″ x 38″.
- ***Plenum housing***—Height, width and length vary according to projector.
- ***Ceiling finish kit***—Ceiling closure panel and trim ring finish ceiling opening.
- ***Factory installed cables*** for RGB, Video and Control.
- ***Projector mounting bracket***—The Aero Low Profile Lift Bracket is compatible. See page 34. Projector may also be mounted flush to bottom pan.
- ***Access door***—A hinged access door in the ceiling for when access to the projector from above the ceiling is not convenient.
- ***Decorative Cover****—An accordion-action shroud that completely covers all 4 sides of the Scissor Lift above the projector improving appearance. White cover conceals scissors in the "show" position. Detaches automatically at pan when lift extends to "service" position. Maximum extension of cover is 48″.
  *Available for SL Series only.
- ***Controls***—Described on page 27.

Complete specifications for Scissor Lift SL & SLX on page 32.



Indiana University School of Law—Indianapolis.
U.S. Patent No. D395,909.

Data for SL & SLX Series Scissor Lifts

- ***Amperes:*** 2.6 (Does not include any load placed on Scissor Lift's pre-wired power cable.)
- ***Capacity:*** 350 lbs.
- ***Show Position:*** Set at factory. Can specify at time of order.
- ***Max. projector size:*** Virtually unlimited. With optional ceiling closure, our largest closure has a maximum projector size of 31½″ w x 44½″ l.
- ***Max. projector height:*** Limited only by available space above the ceiling if recessed.
- ***Minimum clear space above finished ceiling:*** Will vary according to height of projector and options selected.
- ***Ceiling opening***: If using optional closure: B–29¾″ x 29¾″; S–29½″ x 32″; E–29½″ x 40″; J–29½″ x 44″; G–35⅞″ x 49″; U–36⅞″ x 36⅞″.

Dimensions & Data—Scissor Lift SL & SLX Series

Model Number	***SL4***	***SL5***	***SL6***	***SL7***	***SL8***	***SL9***	***SL10***
Height of lift in closed position[1]	8⅛″	9⅛″	10⅛″	11⅛″	12⅛″	13⅛″	14⅛″
Overall lift dimensions (WL)	23″ x 23½″	23″ x 23½″	23″ x 23½″	23″ x 23½″	23″ x 23½″	23″ x 23½″	23″ x 23½″
Max. down travel (Service Position)	4′	5′	6′	7′	8′	9′	10′
Approx. travel time to service position	36 sec.	45 sec.	54 sec.	63 sec.	72 sec.	81 sec.	90 sec.
Net weight (lbs.)	120	125	130	135	140	145	150
Model Number	***SLX11***	***SLX12***	***SLX13***	***SLX14***	***SLX15***	***SLX16***	***SLX17***
Height of lift in closed position[1]	13¾″	15¾″	15¾″	16¾″	16¾″	18¾″	18¾″
Overall lift dimensions (WL)	27″ x 29½″	27″ x 29½″	27″ x 29½″	27″ x 29½″	27″ x 29½″	27″ x 29½″	27″ x 29½″
Max. down travel (Service Position)	11′	12′	13′	14′	15′	16′	17′
Approx. travel time to service position	99 sec.	108 sec.	117 sec.	126 sec.	135 sec.	144 sec.	153 sec.
Net weight (lbs.)	160	165	170	175	180	185	190

[1] Only height of Scissor Lift in closed position. Overall height of projector, optional mounting bracket, optional ceiling closure and optional plenum housing all add to overall height of equipment.

LCD Lift

11132/DRC

BuyLine 3260

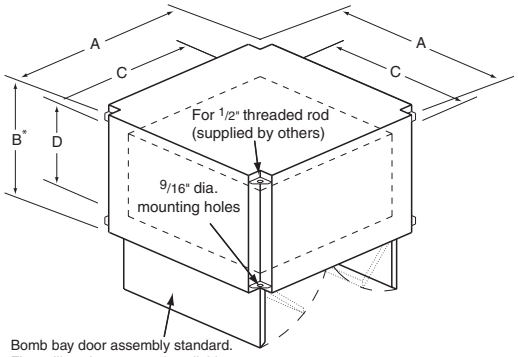
Compact, lightweight lift fits most LCD/DLP projectors

Bomb bay doors and a slim cross-section distinguish the LCD Lift. Most popular LCD/DLP/LCOS projectors fit comfortably inside this unit, which is available in two sizes—Model A and Model B.

Plenum housing of aluminum, with doors finished in white. Doors may also be field finished to match surrounding ceiling. Contains internal switched duplex receptacle, 115v ac, which is powered when the unit is fully open. The LCD Lift contains an innovative current sensor that delays closing of the unit until the projector fan has shut off and the projector has cooled to a safe temperature. Lifting capacity 65 lbs.

System Options

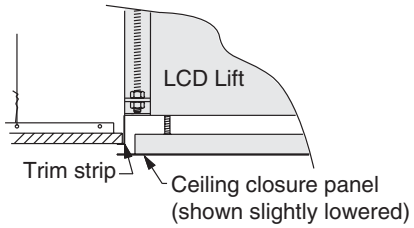
- ***Universal (flat) ceiling closure***—Similar to that furnished for the Scissor Lift. Details in drawing below.
- ***Ceiling access door***—A hinged access door in the ceiling for whenever access to the lift from above the ceiling is not convenient.
- ***Aero Low Profile Lift Bracket***—Convenient projector mount with Aero Universal Projector Bracket available to fit most projectors. Details on page 34.
- ***Factory installed cables*** for RGB, Video and Control.
- ***Control Options***—Standardly operated by one 115v rocker switch. For more options, refer to page 27.



	Model A	Model B
A	24″	29″
B*	16″	21″
C	18″	23″
D	11″	16″
Travel	11½″	16½″

*Bomb bay doors add 1½″ to dimension B. Ceiling closure panel adds 2¼″ to dimension B.

LCD Lift shown (above) with standard bomb bay closure and (detail below) with optional flat closure. Dimensions in chart are based on standard closure.



Complete specifications for LCD Lift on page 32.

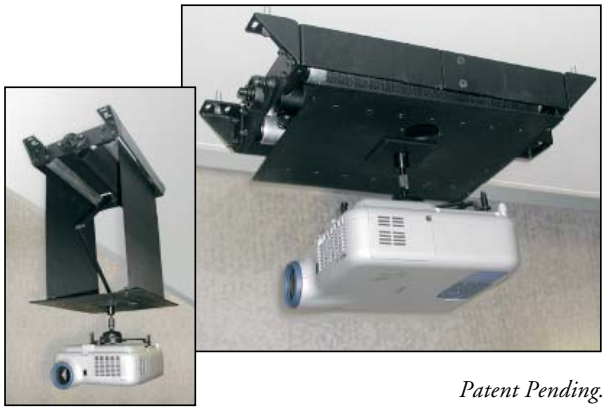
AeroLift 25

NEW

The all-new and very cleverly designed AeroLift 25 has the smallest footprint and height of any video projector lift. It installs easily between standard 2″ x 10″ ceiling joists on 16″ centers.

The AeroLift 25 will accommodate any LCD/DLP/LCOS projector weighing 25 pounds or less. It's powered by a strong, quiet motor-in-roller, and features a stabilizing arm which can also be used for cable management.

Its thoughtful built-in adjustability allows you to deal with job site conditions quickly and easily. All components can be serviced from below, so you never need to open the ceiling. Projector can be mounted flush to bottom pan, or with Aero Low Profile Lift Bracket (shown). Aero bracket enables instant registration of projected image.



Patent Pending.

Note: The AeroLift 25 can also be used to recess speakers, security cameras, videoconferencing cameras or document cameras.

System Options

For system options, please refer to the Micro Projector Lift on page 29.

Dimensions & Data

Closed Position: 3″ high x 12½″ wide x 23¼″ long, not including projector, mounting bracket, ceiling closure or other accessories.

Vertical travel: 24″ (extension)

Net Weight: 20 pounds (lift only)

Ceiling-recessed installation.

Aero Plasma Lift

Clearly the most compact plasma display on the market, the all-new Aero Plasma Lift enables you to conceal a 42″, 50″ or 61″ plasma display in a credenza or cabinet, and quickly raise it into position when it's show time.

The Aero Plasma Lift is extremely strong, with a 250-pound lifting capacity, but it adds only 1½″ to the depth of the plasma display.

Vertical travel can be set from 33″ to 45″. Optional creep mode near top and bottom and pinch hazard protection available.

System Options

• ***Mounting***—Bolted to ceiling beams, bed frame or other structure.

• ***Controls***—Described on page 27.

Credenza or cabinet by others. U.S. Patent No. 6,494,150.

Specifications—LCD Lift

_____LCD Lifts, Model (A/B), electrically operated 115v ac, 60 Hz., to accept projectors weighing up to 65 lbs. Motor is UL, CSA and CE recognized, instantly reversible, and lifetime lubricated. Unit designed to be ceiling recessed, with aluminum panels formed to serve as both frame and enclosure, suitable for use in return air plenum. Ceiling closure to be sheet metal (doors/closure panel), finished in white baked textured powdercoat. Doors shall be hinged to open "bomb bay style". Closure panel shall be attached to unit by threaded rods. Projector to be suspended from internal aluminum tray operated by sprocket and ladder system.

Factory set limit switches to automatically stop travel at open and closed positions. One 115v ac 60 Hz. fused duplex outlet, automatically energized in the fully down position, is to be mounted within the unit. (**Option:** RGB, video hookup or RS232 cables to be factory installed inside unit.) Unit to be furnished with knockouts for cable passage. AC sensor to delay upward operation until projector's ventilation system has shut off. Three-position, 115v control switch (**Option:** 2 or more 24v switches and/or infrared remote transmitter and/or radio frequency remote transmitter) to stop or reverse cycle at any point.

See specifications on page 34 for optional Aero Low Profile Lift Bracket.

Scissor Lift and Scissor Lift SLX

_____Scissor Lift video projector lifts, Model (SL4/SL5/SL6/SL7/SL8/SL9/SL10/SLX11/SLX12/SLX13/SLX14/SLX15/SLX16/SLX17), for projectors weighing up to 350 lbs. Dove grey baked powdercoat finish. Projector bolts onto operating pan, or mounts to pan with optional Draper Aero Low Profile Lift Bracket or manufacturer's recommended ceiling mounting bracket (supplied by others). Electrically operated 110-120v ac, 60 Hz. UL recognized gearmotor, with metal chain drive system, to be lifetime lubricated.

Equipped with 3 sets of stabilizing scissors, positioned on the left, right and rear sides. Also equipped with fail-safe inertial safety belt system and Cable Management System with projector power cord.

Factory set limit switches to automatically stop travel at store, show, and service positions. Single Station Control, standard, consists of one 12v toggle switch to lower lift from "stored" to "show" positions, and one 12v momentary key switch to lower lift from "show" to "service" position. Optional Multiple Station Control for operation from "stored" to "show" positions only; required for use with RF and IR wireless remote control, or Key Operated Switch.

Optional plenum housing consists of suitable painted steel panels for use in return air plenum situations. Optional ceiling closure, finished in white baked textured powdercoat, shall descend smoothly with projector.

Choose a model based on number of feet needed (SL 4′–10′) (SLX 11′–17′) to put your projector within easy reach for servicing.

Scissor Lift: Projector to be suspended from 2¾″ x 20″ x 20″ x 11 ga. steel pan supported by steel scissor arms and operated by two, ⅛″ aircraft cables with 2000 foot/pounds tensile strength per cable.

Scissor Lift SLX: Projector to be suspended from 3¼″ x 24″ x 26″ x 11 ga. steel pan supported by steel scissor arms and operated by two, 3⁄16″ aircraft cables with 4200 foot/lbs. tensile strength per cable.

U. S. Patent No. D395,909.

See specifications on page 34 for optional Aero Low Profile Lift Bracket.

Please Note: The LCD Lift, Scissor Lift and Scissor Lift SLX should be specified in conjunction with a Draper, Inc. video format motorized screen.

AeroLift 25

_____AeroLift 25 video projector lifts, for projectors weighing up to 25 lbs. Electrically operated 115v, 60 Hz. 3-wire motor, instantly reversible, lifetime lubricated, with internal thermal overload protector and brake. UL approved components. Designed to be ceiling recessed or surface mounted to fit within a standard 2″ x 10″ beam, 16″ on center, ceiling joist pocket. Lift to have scissor arm for stabilization.

Factory set limit switches automatically stop travel at open and closed positions. Three-position, 115v switch to stop or reverse cycle at any point. Maximum vertical drop to be 24″.

See specifications on page 34 for optional Aero Low Profile Lift Bracket.

Aero Plasma Lift

_____Aero Plasma Lift, electrically operated 115v, 60 Hz., to accept plasma displays weighing up to 250 lbs. Motor UL recognized, instantly reversible, thermally protected, and lifetime lubricated. Unit designed to be built into cabinet, credenza or other structure. Unit to add less than 1½″ to depth of plasma display.

Flat black powdercoat aluminum frame. To ascend and descend smoothly with plasma at 15-20 second rise speed.

Factory set limit switches to automatically stop travel at open and closed positions. Three-position 115v control switch to stop or reverse cycle at any point.

U. S. Patent No. 6,494,150.

Aero Universal Projector Bracket

Draper has solved the projector bracket problem with a bracket that fits virtually any LCD/DLP projector.* The Aero Universal Projector Bracket is now standard on all Aero and Aero Accuset projector mounts (see page 35).

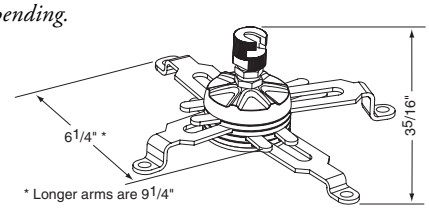
NEW

The Aero Universal Projector Bracket is furnished with two sets of horizontal bracket arms—four long and four short—and four threaded vertical spacers. You can mix and match bracket arms as needed to fit your projector. Infinite adjustability both horizontally and vertically enables you to find and secure the projector's center of gravity in seconds, so projector will hang level.

Attach an Aero Universal Projector Bracket to an LCD projector, and then to an Aero Mount or Aero Accuset Mount. Bracket connects easily to the ball joint at the tip of both projector mounts.

*Any LCD/DLP projector designed for inverted ceiling-mounting, with threaded mounting holes on the bottom of projector, weighing 26 pounds or less.

Patent pending.



Aero Mounts for LCD/DLP Projectors

When appearance matters. Draper redefines projector mounts to complement the latest generation of LCD and DLP projectors.

Inspired Design

Draper mounts are designed specifically for today's smaller LCD/DLP projectors.

Function and Form

Aero Mounts combine stylish appearance with unique features, such as infinite height adjustment, built-in cable management and an infinitely adjustable ball joint for instant registration of the projected image.

Installer Friendly

The Aero Universal Projector Bracket takes the guesswork out of projector bracket selection and attaches to your projector in seconds. Its infinite adjustability enables you to quickly find and secure the projector's center of gravity, so projector hangs level. And if you upgrade your projector, there's no need to buy a new bracket.

With simplified installation procedures and the Aero Universal Projector Bracket, an Aero Mount is an innovative and attractive ceiling mount for your projector.

Adjustable steel ceiling mounting plate has slotted screw holes for fine adjustments.

Telescoping extruded aluminum column in your choice of 5 extension ranges. Matt black epoxy powdercoat finish.

Inner column is infinitely adjustable within the specified range. Loosen one concealed setscrew, lower to the *exact* extension you need and tighten the screw. Inner column has a mechanical safety stop to prevent it from disengaging from outer column.

Ease of installation— One screw adjusts column pitch ±30°. Adapts to cathedral ceilings without special fixtures.

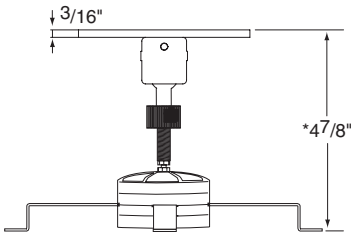
Races for cable management are concealed by "peel off" black moldings. Conveniently located on sides of the column. Hide almost any combination of cables without threading them through a column. Put cables into races after making connections to projector.

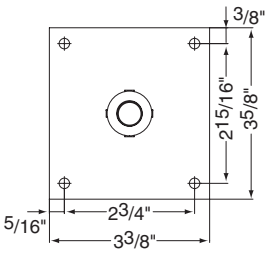
Orient your projector quickly with the steel ball-in-socket located at tip of inner column. Provides instant registration of the projected image and adjusts up to 30° pitch, 30° roll and 360° rotation. Locks with a turn of two setscrews.

In just seconds, the Aero Universal Projector Bracket attaches to the mount's steel ball joint with twist-lock engagement.

Aero Low Profile Mount

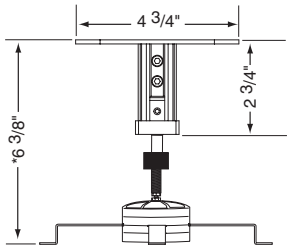
Fixed mount for "low profile" ceiling installations with our Aero Universal Projector Bracket for projectors weighing less than 26 pounds. Places top of projector only 4⅞″ from ceiling (*may vary slightly according to choice of projector). Ball joint adjusts infinitely up to 30° pitch, 30° roll and 360° yaw. The Aero Low Profile Mount is used in all Draper projector lifts.

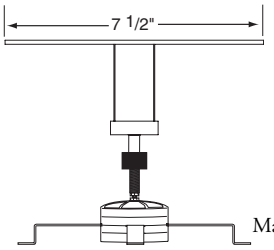




Aero Model 4

Fixed extension mount for installations close to the ceiling with our Aero Universal Projector Bracket. Places top of projector only 6⅜″ from ceiling (*may vary slightly according to choice of projector, and choice of mounting technique). Steel ceiling mounting plate has slotted screw holes for fine adjustments. Ball joint at tip of column adjusts infinitely up to 30° pitch, 30° roll and 360° rotation. For projectors weighing less than 26 lbs.





Exclusive Aero Accessories

Security Lock Kit

While no system can guarantee complete security, the Security Lock Kit is an excellent deterrent, and designed to keep your projector safe and secure when attached to an Aero or Aero Accuset Mount. Kit includes 6′ cable, key lock, 2 loopers, flexible adhesive pad and microslot lock.

Escutcheon Ring

Flexible ring trims the rough cut of the ceiling through which the Aero or Aero Accuset column descends. Shaped to fit outer column. Black Escutcheon Ring pictured at left is form fitted for the Aero Mount. Adhesive tabs included. Chrome rings available for 1½″ and 2″ diameter Aero Accuset mounts.

Escutcheon Clips

Black clips are another option to trim the rough cut of the ceiling opening through which the Aero's inner column descends. Snaps against inner column.

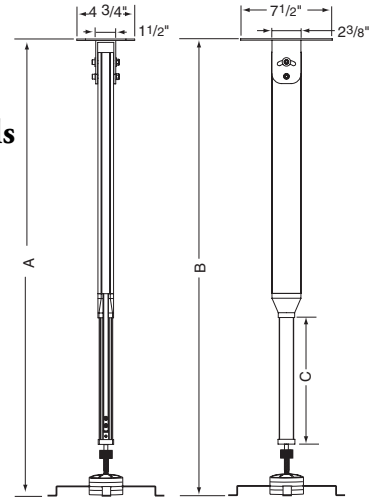
Dimensions—Adjustable Models

(Described on Page 33.)

Model	A (Min)	B (Max)	C
1214	13⅜″	15⅜″	2″
2030	21¼″	31⅛″	9⅞″
2636	27¼″	37″	9⅞″
3444	35⅛″	44⅞″	9⅞″
4252	43″	52⅞″	9⅞″

Maximum load—26 pounds

Adjustability—	*pitch*	*roll*	*yaw*
At ceiling plate	±30°	0°	0°
At ball joint	±30°	±30°	360°



Specifications—Aero Mounts for LCD/DLP Projectors by Draper

_____Aero Mounts for LCD/DLP Projectors, (Low Profile/Model 4/ Adjustable Model 1214/2030/2636/3444/4252), by Draper, Inc.

Aero Universal Projector Bracket: shall be provided for any LCD/DLP projector under 26 lbs, with threaded ceiling-mounting holes. Bracket shall be of steel, with matt black powdercoat finish. Machined steel center column to attach securely to Aero or Aero Accuset ball joint with twist-lock engagement. Short and long arms interchangeable to fit virtually any projector mounting-hole spacing. Infinite adjustment in both horizontal and vertical axes. Must enable installer to simply find and easily secure projector's center of gravity. Aero Universal Projector Bracket to suspend projector from mount. Clamp/shelf type brackets not acceptable. Hardware for attaching bracket to projector provided by Draper—a full set of screws, washers, threaded vertical spacers, and short and long arms to fit virtually any projector model. Universal bracket shall be compatible with all Aero Mounts and Aero Accuset Mounts for LCD/DLP Projectors. Patent pending.

Aero Adjustable Mount Model (1214/2030/2636/3444/4252): Ceiling mount shall consist of a 2-piece telescoping column and Aero Universal Projector Bracket. Column shall be of extruded aluminum, with a matt black powdercoat finish. Outer column shall securely attach to ceiling, or above ceiling, with steel ceiling plate (provided). Installer shall provide mounting hardware appropriate to ceiling conditions. Outer column shall have ±30° pitch adjustment at the ceiling bracket. Outer column shall have two built-in self-concealing cable races with molded press fit covers. Inner column shall have infinite height adjustability within range according to column size. Setscrew shall be used to lock column in position. Inner column shall have steel ball joint to which the Aero Universal Projector Bracket attaches with twist-lock engagement. Inner column shall be equipped with positive safety stop to prevent separation from outer column. Mount shall have up to 30° roll or pitch adjustment and 360° yaw adjustment at ball joint. Two setscrews shall be used to lock ball joint in position. Maximum load shall be 26 lbs.

Aero Model 4 Mount: Ceiling mount shall consist of a fixed column and Aero Universal Projector Bracket. Column shall be of extruded aluminum, with a matt black powdercoat finish, and shall be 2¾″ long. Column shall securely attach to ceiling, or above ceiling, with steel ceiling plate (provided) with slotted screw holes for fine adjustments. Installer shall provide mounting hardware appropriate to ceiling conditions. Column shall have steel ball joint to which the Aero Universal Projector Bracket attaches with twist-lock engagement. Min. overall height of assembled unit shall be 6⅜″. Mount shall provide up to 30° roll or pitch adjustment and 360° yaw adjustment at ball joint. Two setscrews shall be used to lock ball joint in position. Maximum load to be 26 lbs.

Aero Low Profile Mount: Ceiling mount shall consist of a steel ball joint and Aero Universal Projector Bracket. Mount shall be 2″ long, and shall securely attach to ceiling with steel mounting plate (provided). Installer shall provide mounting hardware appropriate to ceiling conditions. Steel ball joint attaches to the Aero Universal Projector Bracket with twist-lock engagement. Min. overall height of assembled unit shall be 4⅞″ . Mount shall provide up to 30° roll or pitch adjustment and 360° yaw adjustment at ball joint. Two setscrews lock ball joint in position. Maximum load to be 26 lbs.

Aero Accuset Mounts

11132/DRC

BuyLine 3260

The all new Aero Accuset family of LCD/DLP projector mounts dramatically increases the number of installations you can address with Draper mounts. Draper now has the solution for any installation—from flush ceiling mounting to 12′ of drop. All mounts include the innovative Aero Universal Projector Bracket. Aero Accuset has four options to choose from, depending upon jobsite conditions and your own preference.

1. Accuset Low Profile Mount

Fixed mount for "low profile" ceiling installations with our Aero Universal Projector Bracket. Places top of projector only 4⅞″ from ceiling (may vary slightly according to choice of projector). Ball joint adjusts infinitely up to 30° pitch, 30° roll and 360° yaw. For projectors less than 26 pounds.

2. Accuset Component Kit

Consists of Ceiling Plate, Bracket Adapter and Universal Projector Bracket. You furnish 1½″ NPT pipe in your required length. Pipe must be threaded on both ends.

3. Accuset Fixed Extension Mount

Consists of Ceiling Plate, Bracket Adapter, Aero Universal Projector Bracket and one section of 1½″ NPT pipe, threaded and notched on both ends, available in 13 standard lengths from which to choose.

4. Accuset Adjustable Mount

Consists of Ceiling Plate, two-piece NPT pipe (2″ diameter upper section and 1½″ diameter lower section) in eight adjustable ranges from which to choose, Extension Adapter, Bracket Adapter and Aero Universal Projector Bracket. Exclusive feature—this mount is infinitely adjustable within its specified range. All Aero Accuset projector mounts offer infinite adjustment of the projector up to 30° pitch, 30° roll and 360° yaw. Adjustable mounts (see below) provide built-in cable management. Draper's proprietary new Aero Universal Projector Bracket fits any projector designed for inverted mounting with threaded mounting holes on bottom, and allows you to quickly find and secure the projector's center of gravity. Maximum load is 26 pounds.

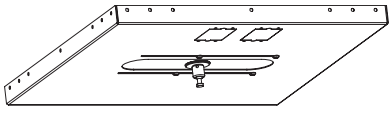
Optional Accessories

Accuset Angled Ceiling Plate

8″ x 6″ x 2″ (w x l x h) plate attaches to vaulted or angled ceilings. Adjusts from 0–25° allowing the projector to remain level. Must be used with Aero Accuset Ceiling Plate.

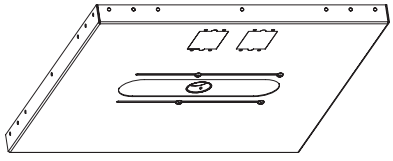
Accuset Low Profile Suspended-Ceiling Panel

Steel panel suspends from structure to fit in 2′ x 2′ ceiling grid. 23¾″ x 23¾″ white panel provides 10″ of overall lateral adjustment for precise projector placement, plus a ball joint for attaching an Aero Universal Projector Bracket.



Accuset Suspended-Ceiling Panel

Steel panel suspends from structure to fit in 2′ x 2′ ceiling grid. 23¾″ x 23¾″ white panel provides 10″ of overall lateral adjustment for precise projector placement. Specify 1½″ or 2″ Aero Accuset pipe to attach directly to threaded opening.



Security Lock Kit

6′ cable, key lock, flexible adhesive pad and microslot lock to keep your projector safe and secure.

***Escutcheon Ring*—**Chrome ring trims the ceiling hole around your mount.

Aero Accuset Ceiling Plate— 8″ x 6″ x 1⅝″ (w x l x h) plate attaches to building structure or can be suspended with threaded rod.

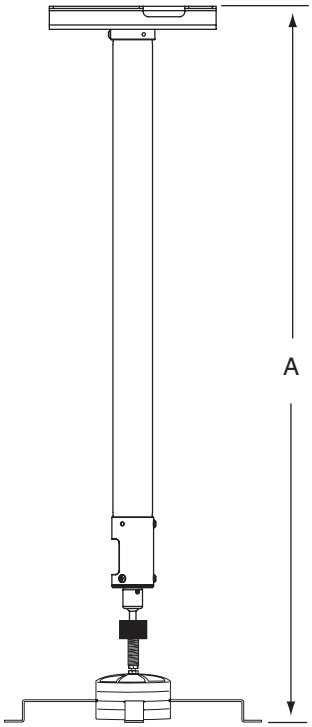
Accuset Adjustable Mount

Two-Piece NPT Pipe— A 2″ dia. upper section and 1½″ dia. lower section in your required range.

Accuset Extension Adapter—Provides infinite telescoping adjustment to place projector at preferred height. Comes complete with threaded ring which acts as a positive stop for 1½″ NPT pipe section.

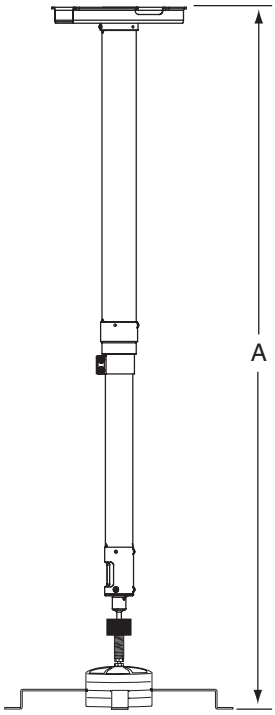
Aero Accuset Bracket Adapter—Attaches Aero Universal Projector Bracket to 1½″ Aero Accuset pipe. Allows for cable management.

Aero Accuset Adjustable and Fixed Extension Mounts



Aero Accuset Fixed Extension Mount

A	Pipe Length
10½″	FLUSH
14½″	6″
20½″	12″
26½″	18″
32½″	24″
44½″	36″
56½″	48″
68½″	60″
80½″	72″
92½″	84″
104½″	96″
116½″	108″
128½″	120″



Aero Accuset Adjustable Mount Adjustment Ranges

A
15″—17¾″
21″—29¾″
29¾″—46¾″
44¾″—77¾″
57″—101¾″
69″—125¾″
81″—149¾″

Specifications—Aero Accuset Mounts for LCD/DLP Projectors

_____ Aero Accuset Mounts for LCD/DLP Projectors, by Draper, Inc.

Aero Universal Projector Bracket: shall be provided for any LCD/DLP projector under 26 lbs., with threaded ceiling-mounting holes on bottom of projector. Bracket shall be of steel, with black powdercoat finish. Machined steel center column to attach securely to Aero or Aero Accuset ball joint with twist-lock engagement. Short and long arms interchangeable to fit virtually any projector mounting-hole spacing. Infinite adjustment in both horizontal and vertical axes. Must enable installer to simply find and easily secure projector's center of gravity. Aero Universal Projector Bracket to suspend projector from mount. Clamp/shelf type brackets not acceptable. Hardware for attaching bracket to projector provided by Draper—a full set of screws, washers, threaded vertical spacers, and short and long arms to fit virtually any projector model. Aero Universal Projector Bracket shall be compatible with all Aero Mounts and Aero Accuset Mounts for LCD/DLP Projectors. Patent pending.

Aero Accuset Adjustable Mount: Consists of 10-gauge cold rolled steel Ceiling Plate; two-piece telescoping, schedule-10 steel NPT pipe (2″ dia. upper pipe and 1½″ dia. lower pipe), threaded and slotted on each end, in choice of eight adjustable ranges; Extension Adapter; Bracket Adapter and Aero Universal Projector Bracket. Mount shall be infinitely adjustable within its specified range. Size ranges to be ([15⅜″–17¾″] [21″–29¾″] [29¾″–46¾″] [44¾″–77¾″] [57″–101¾″] [69″–125¾″] [81″–149¾″]). Telescoping movement of lower pipe shall provide infinite height adjustability. Positive stop shall prevent separation of columns. Extension Adapter shall be used to lock lower column in position. Bracket Adapter shall have steel ball joint to which the Aero Universal Projector Bracket attaches with twist-lock engagement. Steel ball joint shall have up to 30° roll or pitch adjustment and 360° yaw adjustment. Two setscrews shall be used to lock ball joint in position. Lower pipe and Bracket Adapter can be further secured using supplied Torx or security screws. Black powdercoat finish. Aero Accuset Adjustable Mount to provide built-in cable management. Maximum load shall be 26 lbs. Installer shall provide mounting hardware appropriate to ceiling conditions.

Aero Accuset Fixed-Extension Mount: Consists of 10-gauge cold rolled steel Ceiling Plate; one piece of 1½″ dia., schedule-10 steel NPT pipe, threaded and slotted on each end, in choice of 12 fixed lengths; Bracket Adapter and Aero Universal Projector Bracket. Mount shall have overall fixed length of ([14½″][20½″][26½″][32½″][44½″][56½″][68½″][80½″][92½″] [104½″] [116½″][128½″]). Bracket Adapter shall have steel ball joint to which the Aero Universal Projector Bracket attaches with twist-lock engagement. Steel ball joint shall have up to 30° roll or pitch adjustment and 360° yaw adjustment. Two setscrews shall be used to lock ball joint in position. Pipe and Bracket Adapter can be further secured using supplied Torx or security screws. Black powdercoat finish. Aero Accuset Fixed Extension Mount to provide built-in cable management. Maximum load shall be 26 lbs. Installer shall provide mounting hardware appropriate to ceiling conditions.

Accuset Component Kit: Consists of Ceiling Plate, Bracket Adapter and Universal Projector Bracket. Installer to furnish 1½″ NPT pipe in required length. Pipe must be threaded on both ends.

Accuset Low Profile Fixed Mount: Ceiling mount shall consist of a steel ball joint and Aero Universal Projector Bracket. Mount shall be 2″ long, and shall securely attach to ceiling with steel mounting plate (provided). Installer shall provide mounting hardware appropriate to ceiling conditions. Steel ball joint attaches to the Aero Universal Projector Bracket with twist-lock engagement. Min. overall height of assembled unit shall be 4⅞″ . Mount shall provide up to 30° roll or pitch adjustment and 360° yaw adjustment at ball joint. Two setscrews lock ball joint in position. Maximum load to be 26 lbs.

Optional Accessories:

Angled Ceiling Plate: 8″ x 6″ x 2″ (w x l x h) 10-gauge cold rolled steel plate attaches to vaulted or angled ceilings. Black powdercoat finish. Max. load 26 lbs. Adjusts from 0-25° allowing the projector to remain level. Must be used with Aero Accuset Ceiling Plate.

Flush Extension: 1½″ long x 1½″ dia. steel NPT pipe, threaded the entire length. For fixed mounting projector close to the ceiling. Connects one end to Aero Accuset Ceiling Plate and the other to a Bracket Adapter and Aero Universal Projector Bracket. Max. load 26 lbs.

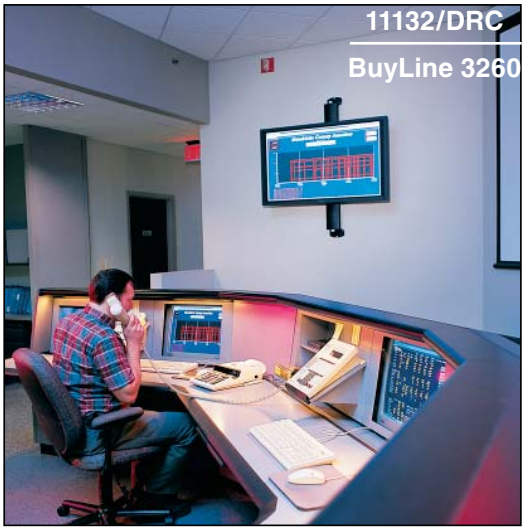
Accuset Suspended-Ceiling Panel: 23¾″ x 23¾″ 16-gauge cold rolled steel panel, finished white, with threaded collar for attaching threaded pipe or Flush Extension (provided) and adjustable collar to allow a 10″ range of left-to-right or front-to-back projector adjustment, depending on orientation of panel. Knockouts provided for electrical wiring; knockouts fit standard j-box cover plate. Four turnbuckles and four 50″ lengths of 62/1000 steel wire provided for suspending panel. Max. load 26 lbs.

Accuset Low Profile Suspended-Ceiling Panel: Same as Suspended-Ceiling Panel (above), but with ball joint and Aero Universal Projector Bracket. Max. load 26 lbs.

Please Note: Aero Accuset Mount accessories will work with schedule 40 steel pipe, but not schedule 80 steel pipe.

Aero Mounts for Plasma and Flat Panel Displays

Sophisticated and functional describe Draper's line of Aero Mounts for plasma displays and LCD flat panel displays.



Inspired Design

As plasma and LCD displays become more prevalent in work and home environments, the importance of a good looking "mount" increases. Our sophisticated design incorporates cutting edge technology to harmonize with today's displays.

Function and Form

Aero Mounts combine high-tech appearance with functional features: unique Slide Mounting System; universal and display-specific mounting brackets; height adjustments; and on most models—built-in cable management, rotation, tilt, monitor orientation, concealed power outlets and adjustable shelves.

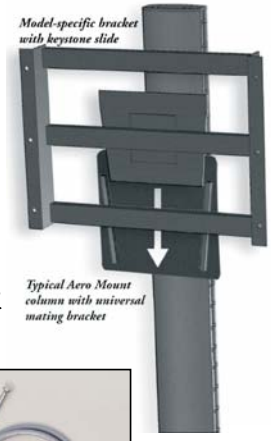
Installer Friendly

The keystone-shaped Aero Slide Mounting System makes mounting your display as easy as hanging a picture, and as stable as the wall it's attached to. Moving or upgrading your display is easy. Our Security Lock Kit is an excellent theft deterrent. Plus, the addition of the new Universal Plasma Bracket (see below) takes the guesswork out of ordering a mounting bracket.

Exclusive Aero Features

Aero Slide Mounting System

Each Aero plasma display mount consists of an attractive and sturdy mount designed for wall, ceiling or floor mounting, and an Aero Universal Plasma Bracket or plasma-specific bracket which bolts to the back of the plasma monitor. The bracket has a large keystone shaped plate, which slides into a universal mating bracket on the Aero mount. Once in place, the bracket is secured with lock devices.



The slide system is universal to all Aero brackets and mounts, so it's easy to move your display from one venue to another. If you buy a new display, you don't have to buy a new mount.

Security Lock Kit

Keeps your plasma, DVD, VCR, amplifier and other related equipment safe and secure. Kit includes cable, key lock, loopers, flexible adhesive pad and microslot lock.

Cable Management

Conceal cables inside the column. A discrete channel is provided for cable passage; cables are kept in channel with a simple clip.

Adjustable Shelves

Optional grey or black shelves, 16⅜″ wide x 12⅝″ deep. Shelves can hold up to 22 lbs. each and accommodate a variety of peripherals. A positive locking clip keeps shelves securely attached. Height may be adjusted in 2″ increments.

FPD Adapter

Aero FPD Adapter allows you to convert any Aero Mount for Plasma Displays into a mount for LCD/TFT flat panel displays. Mounting plate fits any LCD/TFT flat panel display with a 75 mm or 100 mm mounting hole pattern. Maximum weight capacity 33 lbs.

NEW

Aero Universal Plasma Bracket

Draper has solved the problem of choosing a mounting bracket to fit the variety of plasma displays on the market today—with the innovative Universal Plasma Bracket. The Aero Universal Plasma Bracket attaches to almost any plasma display through 50″ diagonal and under 100 lbs. The bracket comes with a full set of screws, washers, extenders and spacers to fit virtually any plasma model. No need to order a plasma-specific bracket.

Specially shaped keystone plate works for both portrait *and* landscape installation on any Draper Aero Mount for Plasma Displays—ceiling, floor, wall or mobile. Assembled bracket is less than one inch deep, finished in black.

Each Aero Universal Plasma Bracket comes with a full set of screws, washers, extenders, spacers, extension plates and extension arms to fit virtually any plasma model. Patent pending.

Aero Universal Plasma Bracket in landscape orientation

Aero Universal Plasma Bracket in portrait orientation

Aero Wall Mounts for Plasma Displays

Basic Tilt

Aero Basic Tilt Wall Mount

The Aero Basic Tilt has an extremely low profile, protruding only 1″ from the wall (not including a universal or plasma-specific bracket). Mount any plasma display flat to the wall, or tilted up to 10°. Formed of heavy gauge steel, the Aero Basic Tilt attaches to two wall studs on centers, with two installation points per stud. The tilting mechanism locks into place. Maximum capacity 330 lbs. Handles displays up to 63″ diagonal.

Aero 3Dimension Wall Mount

3Dimension

NEW

The 3Dimension Wall Mount provides complete flexibility in positioning your plasma display. Folded flat, it's just 4″ from the wall. Yet it floats easily to any position up to 26″ away from the wall. Pull it out, move it left-to-right, and tilt it forward (up to 10°), in any combination! Supports one plasma display (any size through 42″ diagonal). Maximum capacity 88 pounds. Black finish.

Aero W490 and W1150 Wall Mounts

W490

Mount plasmas on attractive extruded aluminum columns. Column attaches to wall with heavy gauge steel mounting plates, and enables display to be rotated 20°. Display can be mounted either horizontally or vertically and tilted up to 15°.

W490 is a 19″ column and holds one plasma. Aero W1150 is a 45″ column and holds up to two displays and optional shelves. The plasma can be raised and lowered over a 33½″ range in 2″ increments. Optional shelves in black or grey.

Aero V4 Wall Mount

V4

The Aero V4 articulating mount swivels and rotates the display in all directions, limited only by the wall. The Aero V4 swivels at both the wall and bracket support, so you can position the display flush against the wall when not in use. Extends the plasma display up to 30″ from the wall. Display can be tilted up to 15° and rotated 360°. Swivel ±90° (depending on size of display). Maximum capacity 164 lbs. Handles displays up to 63″ diagonal.

Aero W/F2000 Wall-to-Floor Mount

This mount features a 78″ extruded aluminum column which attaches to the wall *and* floor with sturdy steel swivel brackets. Mount up to three plasma displays horizontally, or either one or two vertically, depending on display sizes. Displays can be raised or lowered over a 58″ range in 2″ increments. Two lock devices secure each display in its bracket. Shelves optional.

Aero Ceiling Mounts for Plasma Displays

Aero C Basic Ceiling Mount

C Basic

NEW

Quickly and safely install Draper's pipe-style plasma mount to the ceiling or above it. Attach a universal or display-specific bracket to the back of the plasma and slide its keystone-shaped plate onto the C Basic's universal mating bracket.

Allows up to 24″ of vertical adjustment in 4″ increments. Display can be tilted up to 25° and has 360° rotation. Maximum capacity is 165 lbs. and handles displays up to 63″ diagonal.

Aero C/F3000 Ceiling-to-Floor Mount

CD490 & C490

C/F3000

The Aero C/F3000 features a 118″ extruded aluminum column with sturdy steel swivel mounts for attachment to ceiling and floor. A built-in ±2″ height adjuster makes the Aero C/F3000 installer friendly, and it can also be shortened in the field if desired.

Aero C490/CD490 amd C1150/CD1150 Ceiling Mounts

The Aero C490 suspends a plasma display from a 19″ long extruded aluminum column mounted to a heavy gauge steel ceiling bracket. Ceiling bracket swivels to permit a complete 360° horizontal rotation, and display can be tilted up to 15°. Display can also be raised and lowered on column over a 6″ range in 2″ increments. For screens up to 50″ diagonal, the display's center-line can be 33⅝″ to 41½″ from the ceiling bracket. For screens 60″ diagonal and larger, the display's center-line can be 37¾″ to 45⅝″ from the ceiling bracket.

The Aero C1150 is similar to the Aero C490 but offers a 45″ long column. Display can be raised and lowered over a 6″ range in 2″ increments. For screens up to 50″ diagonal, the display's center-line can be 59⅝″ to 67½″ from ceiling bracket. For screens 60″ diagonal and larger, the display's center-line can be 63¾″ to 71⅝″ from bracket.

The **Aero CD490** and **CD1150** are dual ceiling mounts, and each suspends two plasma displays, back-to-back.

Aero T4 Ceiling Mount

T4 with adjustable upper bracket

Install a plasma with the top of the image virtually flush with the ceiling line. Complete 360° rotation and up to 15° of tilt are standard. A separate "above the ceiling" mounting bracket is available for structural support with a suspended ceiling installation—or it may be exposed in rooms with higher ceilings. This extension bracket adjusts from 14½″ to 30¼″ long. Maximum capacity 165 pounds.

Specifications—Aero Mounts for Plasma Displays

_____ Aero Wall Mounts for Plasma Displays, model (Basic Tilt/W490/W1150/WF2000/V4/3Dimension Wall Mount), by Draper, Inc., of Spiceland, Indiana.

_____ Aero Ceiling Mounts for Plasma Displays, model (C Basic/C490/CD490/C1150/CD1150/C/F3000/T4), by Draper, Inc., of Spiceland, Indiana.

Aero Universal Plasma Bracket: shall be provided for any plasma display through 50″ diagonal and under 100 lbs. Bracket shall be of steel, with matt black powdercoat finish, and shall feature keystone-shaped mounting panel which will slide into steel mating bracket on Aero Mounts for easy, safe, and sturdy mounting. Aero Universal Plasma Bracket to have both landscape and portrait orientation capabilities. Hardware for attaching bracket to plasma display provided by Draper—a full set of screws, washers, extenders, spacers, Extension Plates and Extension Arms to fit virtually any plasma model. Aero Universal Plasma Bracket shall be compatible with all Draper Aero Mounts for Plasma Displays. Patent pending.

Plasma-specific Bracket: shall be provided for any plasma display over 50″ diagonal and over 100 lbs. Bracket shall be of steel, with matt black powdercoat finish, and shall feature keystone-shaped mounting panel which will slide into steel mating bracket on all Aero Mounts for easy, safe, and sturdy mounting. Hardware for attaching bracket to plasma display provided by Draper. Bracket shall be compatible with all Draper Aero Mounts for Plasma Displays.

Basic Tilt: Extremely low profile, protruding approximately 1″ from wall. Wall mount and tilting mechanism shall be of steel, with matt black powdercoat finish. Unit shall be securely attached to mounting surface using two angles, spaced so that fasteners are 16″ apart on center. Tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Unit shall allow 10° tilt, and feature a safety lock to keep plasma display in place. Tilting mechanism shall also lock into place for non-tilting installations.

3Dimension: Articulating wall mount collapses to depth of 4″ (minus plasma display and bracket). The articulating arm extends the display up to 26″ from wall, and allows swivel left and right as far as the wall will allow. Mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Display can be tilted 10°. Holds screens up to 42″ diagonal. Maximum weight capacity 88 lbs.

V4: Swiveling wall mount shall be of steel, with matt black powdercoat finish, and shall be attached to mounting surface using steel mounting plate, allowing bracket to swivel approximately ±90° (depending on size of plasma display). Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Unit shall allow 15° tilt and 360° rotation, and feature safety screws to keep plasma display in place.

W490: Wall mount shall be extruded aluminum pillar, with matt black powdercoat finish. Pillar shall be securely attached to mounting surface using two steel mounting plates. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Display can be mounted horizontally or vertically. Unit shall allow 15° tilt and 20° rotation, and feature safety screws to keep plasma display in place. Pillar shall contain electric panel with two grounded outlets, provided with power cord and grounded plug. Maximum capacity 330 lbs.

W1150: Wall mount shall be extruded aluminum pillar with matt black powdercoat finish. Pillar shall be securely attached to mounting surface using two steel mounting plates. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. One or two displays can be mounted horizontally or one can be mounted vertically. Unit shall allow 15° tilt and 20° rotation, and feature safety screws to keep plasma display in place. Display can be raised or lowered up to 33½″ in 2″ increments. Pillar shall contain electric panel with two grounded outlets, provided with power cord and grounded plug. Discrete cable track located on sides of support pillar. Maximum capacity 330 lbs.

W/F2000: Wall/Floor mount shall be pillar of extruded aluminum, with matt black powdercoat finish. Pillar shall be securely attached to wall and floor using two steel mounting plates. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Up to three displays can be mounted horizontally or up to two can be mounted vertically, depending on display sizes. Unit shall allow 15° tilt (except when more than one display is mounted) and 20° rotation, and feature safety screws to keep plasma in place. Pillar shall contain electric panel with two grounded outlets, provided with power cord and grounded plug. Discrete cable track shall be located on sides of support pillar.

Plasma display sliding mounting bracket shall be provided to match specific display model. Sliding bracket shall be of welded steel, with black structured finish, and shall feature keystone-shaped mounting panel which will slide into a steel mating bracket on supports for easy, safe, and sturdy mounting. Bracket shall be compatible with all Draper wall and ceiling supports. Mounting hardware supplied by others.

C Basic: Ceiling mount to be steel pipe style with matt black epoxy powdercoat finish. Column shall allow up to 24″ of vertical adjustability in 4″ increments. Unit shall allow 25° of tilt and 360° rotation, and feature safety screws to keep plasma display in place. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Maximum capacity 165 pounds and handles displays up to 61″ diagonal. Column has built-in cable management system. Mounting hardware by others.

T4: Ceiling mount shall be steel, with matt black powdercoat finish. Support shall be securely attached to mounting surface using steel mounting plate. Steel adapter plate shall allow 15° tilt and 360° rotation. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Unit shall feature safety screws to keep plasma display in place. Mounting hardware provided by others. For suspended ceilings and higher structural ceilings, side supports shall be attached to adjustable steel column to allow height adjustment according to installation requirements.

C490: Ceiling mount to be extruded aluminum pillar, with matt black powdercoat finish. Pillar shall be securely attached to mounting surface using steel mounting plate. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Unit shall allow 15° tilt and 360° rotation, and feature safety screws to keep plasma display in place. Mounting hardware by others.

CD490: Same as C490 but accommodates two displays back to back.

C1150: Ceiling mount shall be extruded aluminum pillar, with matt black powdercoat finish. Pillar shall be securely attached to mounting surface using steel mounting plate. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Unit shall allow 15° tilt, and 360° rotation, and feature safety screws to keep plasma display in place. Mounting hardware by others.

CD1150: Same as C1150 but accommodates two displays back to back.

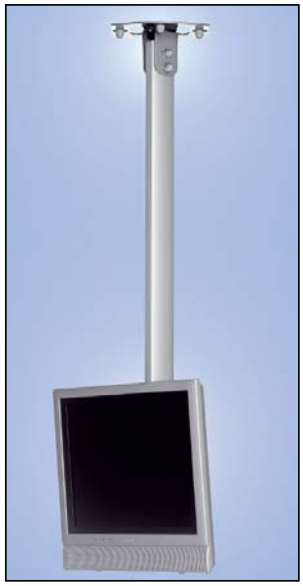
C/F3000: Ceiling/Floor mount shall be extruded aluminum pillar, with matt black powdercoat finish. Pillar shall be securely attached to ceiling and floor using two steel mounting plates. Steel tilting mechanism shall feature mating bracket to accept mounting panel of Draper's keystone-shaped slide on an Aero Universal Plasma Bracket or plasma-specific mounting bracket. Up to three monitors can be mounted horizontally; up to two can be mounted vertically. Unit shall allow 15° tilt (except when more than one display is mounted) and 360° rotation, and feature safety screws to keep plasma display in place. Pillar shall contain electric panel with two grounded outlets, provided with power cord and grounded plug. Discrete cable track shall be located on side of support pillar. Mounting hardware by others.

For all Aero Mounts for Plasma Displays, installer shall provide mounting hardware appropriate to wall and/or ceiling conditions.

For complete submittals, instructions and specifications, visit Draper's web site at www.draperinc.com.

Aero Flat Panel Display Ceiling Mounts

Aero FPD Adjustable Ceiling Mount



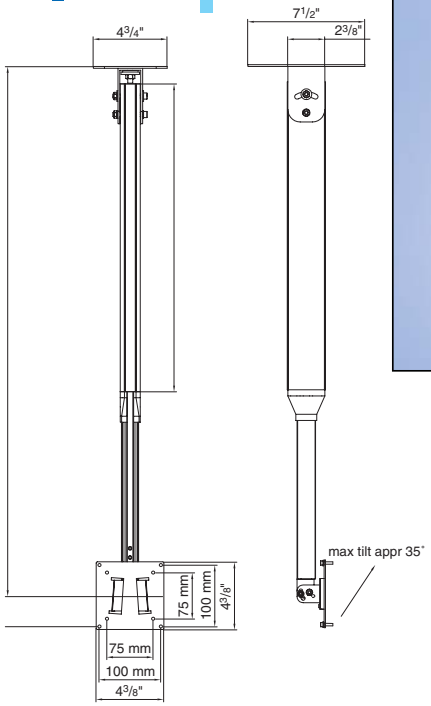
Attractive, telescoping column of natural anodized aluminum for suspending LCD flat panel displays from the ceiling. Quickly and safely install Draper's Aero FPD Ceiling Mount to the ceiling or above it.

Available in five lengths—each infinitely adjustable within the specified range (see chart below). 30° of tilt at the ceiling plate. 0-35° of tilt at the display bracket. 360° of rotation.

Column has built-in cable management system. FPD Bracket (included) fits both 75 mm and 100 mm mounting hole patterns on LCD and TFT panels. Maximum weight capacity 33 lbs.

Cable Management is a simple task with the Aero FPD Ceiling Mount.

Model	Adjustable range—from display's center-line to ceiling bracket
FPD1214	10¼″—12⅜″
FPD2030	16″—26″
FPD2636	24″—34″
FPD3444	32″—42″
FPD4252	40″—50″



Aero Flat Panel Display Wall Mounts

Aero FPD Wall Infinite Mount

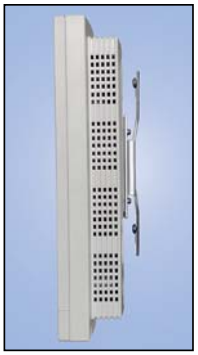
Rotate, tilt or angle your display at will, while placing the back of your monitor only 5″ from the wall. Silver lacquer finish. Ball joint allows 25° adjustment in all directions. Exclusive Aero Slide Mounting System. FPD Bracket (included) fits both 75 mm and 100 mm mounting hole patterns on LCD and TFT panels. Maximum weight capacity 17 lbs. Warranted for one year against defects in materials and workmanship.

Aero FPD Wall AT Mount

The monitor can be angled or tilted. Back of your display is only 2⅛″ from the wall. Silver lacquer finish. 15° tilt up and down; 20° rotation left to right.Exclusive Aero Slide Mounting System. FPD Bracket (included) fits both 75 mm and 100 mm mounting hole patterns on LCD and TFT panels. Maximum weight capacity 33 lbs. Warranted for one year against defects in materials and workmanship.

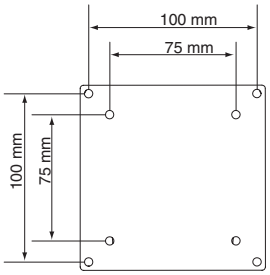
Aero FPD Wall Mount

The bracket cannot be tilted or angled, but the display is only ⅝″ from the wall. Silver lacquer finish. Exclusive Aero Slide Mounting System. FPD Bracket (included) fits both 75 mm and 100 mm mounting hole patterns on LCD and TFT panels. Maximum weight capacity 33 lbs. Warranted for one year against defects in materials and workmanship.



Aero FPD Bracket

The FPD Bracket (included with all FPD ceiling and wall mounts) is universal to all panels with a 75 mm or 100 mm mounting hole pattern.



Specifications—
Aero Mounts for LCD Flat Panel Displays

_____ Aero Mounts for Flat Panel Displays, model (Aero FPD Wall; Aero FPD Wall AT; Aero FPD Wall Infinite; Aero FPD Ceiling Mount [FPD1214/FPD2030/FPD2636/FPD3444/FPD4252]), by Draper, Inc., of Spiceland, Indiana.

FPD Bracket: Universal mounting bracket shall be provided to match LCD-TFT flat panel displays with 75 mm and 100 mm mounting hole spacing. Bracket slides into steel mating bracket on wall supports for easy, safe and sturdy mounting. Bracket shall be compatible with all Draper wall and ceiling supports and shall lock in place using a security screw. Hardware for mounting bracket to flat panel display provided by Draper; hardware for attaching mount to wall supplied by others.

Aero FPD Ceiling Mount: Select (FPD1214/FPD2030/FPD2636/FPD3444/FPD4252). Two-piece telescoping column shall be of extruded aluminum, with anodized aluminum finish. Outer column shall securely attach to ceiling with heavy steel ceiling plate (provided). Installer shall provide mounting hardware appropriate to ceiling conditions. Outer column shall have +20° tilt and 360° rotation at the ceiling bracket. Outer column shall have two built-in self-concealing cable races with molded press fit covers. Inner column shall have infinite height adjustability within range according to column size. Mount shall have up to 35° tilt and 360° rotation at lower bracket. Maximum load shall be 33 lbs.

Aero FPD Wall Infinite: Consists of fixed column and steel mating bracket. Column shall be of extruded aluminum, with silver lacquer finish, and shall locate the back of the flat panel display 4⅜″ from the wall. Column shall securely attach to wall with heavy steel ceiling plate (provided). Installer shall provide mounting hardware appropriate to wall conditions. Ball joint allows 25° of rotation, tilt or angling of screen. Maximum weight capacity 17 lbs.

Aero FPD Wall AT: Wall bracket shall be of steel, with a silver lacquer finish. 15° tilt up and down; 20° left to right. The back of the screen shall be located 2⅛″ from the wall. Maximum weight capacity 33 lbs.

Aero FPD Wall: Wall bracket shall be of steel, with silver lacquer finish. The bracket is stationary, and cannot be tilted or angled. The back of the screen shall be located ⅝″ from the wall. Maximum weight capacity 33 lbs.

For all Aero Mounts for LCD Flat Panel Displays, installer shall provide mounting hardware appropriate to wall or ceiling conditions.

Optional Accessories for LCD/TFT flat panel mounts:

Aero FPD Adapter: allows you to convert any Aero Mount for Plasma Displays into a mount for LCD/TFT flat panel displays. Fits any LCD-TFT flat panel display with 75 mm and 100 mm mounting hole patterns. Maximum weight capacity 33 lbs.

Escutcheon Ring: Black ring shall trim and cover ceiling opening around Aero Ceiling Mount. Designed to fit larger portion of column. Shall include adhesive tabs for attaching to ceiling tile.

Escutcheon Clips: Black clips shall snap onto smaller, adjustable portion of column to cover ceiling opening around Aero Ceiling Mount.

VideoConferencing Camera Box

Draper's VideoConferencing Camera Box recesses a camera in the wall, behind a hinged tempered glass door. The glass is tilted slightly forward to minimize glare. Makes installing a videoconferencing camera quick and easy. Installer simply cuts the desired opening in the wall, inserts the five-sided steel enclosure and engages the "quick clamps". No additional hardware or brackets are required. There's no finishing either: the box has a bezel that trims the rough opening. All visible surfaces are finished with black epoxy powdercoat. Four convenient cable exits make wire management simple. Suitable for use with thin panels or gypsum board wall openings. Size is 8⅞″ high x 16⅜″ wide x 11″ deep. Also available in locking version to protect sensitive equipment. Two keys provided.

Features Include:

- *Precision formed and punched from 18-gauge, cold-rolled steel.*
- *Finished inside and out with durable black epoxy powdercoat. Front of enclosure features a ⅞″ finishing frame bezel that is self-trimming.*
- *Enclosure features four "knock out" wire management locations for cabling options.*
- *Enclosure will mount in any opening. Built-in "quick clamps" can clamp to most walls or panels.*
- *Glass door is hinged to fold down for easy access.*

For complete submittals, instructions and specifications, visit Draper's web site at www.draperinc.com.

Rear Projection Screens from Draper

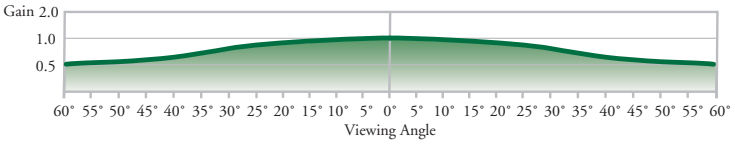
The Leader in Innovation

Each rear projection system needs to fit its environment: audience seating, projector (light output, resolution, image format) and room light level. Only Draper can provide five distinct rear projection screen technologies.

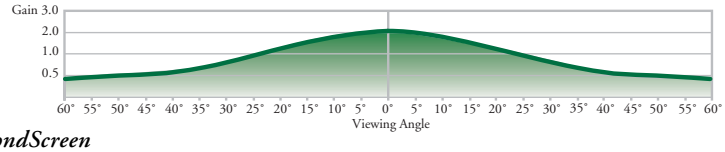
- ***IRUS (Infinite Resolution Uniformity Screen)***—Proprietary technology, only from Draper. Designed for high-resolution, single lens video and data projectors. Perfect for SXGA and UXGA displays. Page 43.
- ***Vortex***—The Vortex rear projection screen combines the outstanding center-to-corner uniformity and ambient light reflection of an optical rear projection screen with the high resolution of a diffusion-coated screen. Exceptional contrast levels. Best for use in command and control centers where high ambient light is a problem. Page 44.
- ***DiamondScreen***—Optical rear projection screen. DiamondScreen's cast acrylic lens system distributes projected light in a wide horizontal viewing cone, while minimizing vertical light spread. Page 44.
- ***HoloView***—Revolutionary rear screen adds drama to point-of-purchase and public displays. The transparent screen is suspended in an inconspicuous aluminum frame. When a projector's beam strikes it, the image seems to come from nowhere! Page 45.
- ***Cinescreen***—Draper's diffusion-coated glass or acrylic projection screens. Select the optical coating and tint to fit your need. Suitable for all projection formats. Pages 46-47.

Brightness & Uniformity—The charts at right are useful for evaluating the gain (brightness) and uniformity of Draper rear projection screens. The flatter the curve within the cone where the audience will be seated, the greater the uniformity of the image they will see. The higher the curve, the brighter the image (at center).

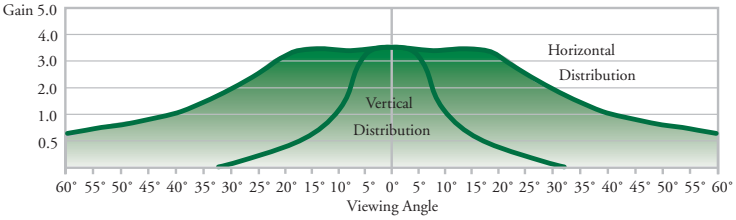
IRUS



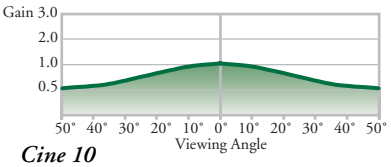
Vortex



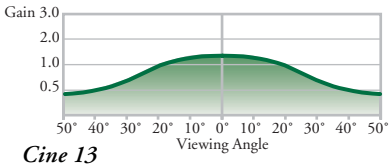
DiamondScreen



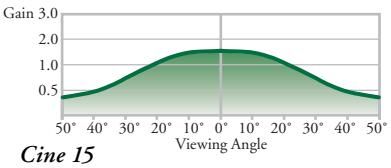
Cinescreen Optical Coatings



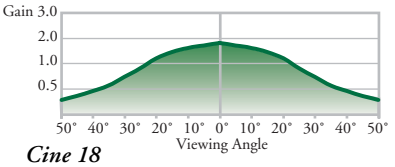
Cine 10



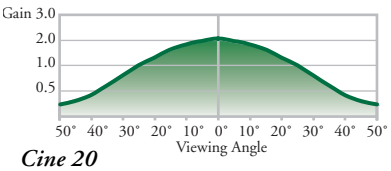
Cine 13



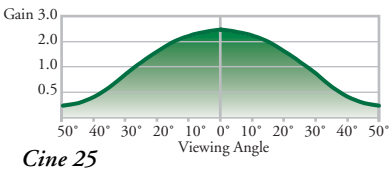
Cine 15



Cine 18



Cine 20



Cine 25

IRUS—

Infinite Resolution Uniformity Screen

Belden Inc., Richmond, IN. Installation by MCSi, Indianapolis.

When Legibility Is the Key

The Draper IRUS—Infinite Resolution Uniformity Screen—is specifically designed to provide maximum legibility with any projector. Today's SXGA and UXGA displays offer higher resolutions than ever before—and that means more information for your audience to absorb. With these projectors, you need a screen that's up to the challenge.

In order to convey an increasing amount of information to the viewer, the IRUS uses proprietary technology to display the sharpest, most uniform image you've ever seen. An improvement for every rear screen application, the IRUS actually provides higher resolution than the human eye can perceive. The image is so consistent that it can be clearly seen even at 90° off axis (although most subject matter would be extremely distorted from this perspective). Brightness is consistent from center to corner—free of "hot spots". The IRUS provides excellent contrast, even in lighted rooms, with superior color reproduction.

The IRUS is perfect for command and control centers, where operators often have to watch for small changes in a large grid of screens for hours on end. Under those demanding conditions, the IRUS offers—

- *Uniform resolution compatibility*
- *Uniform center–to–corner brightness*
- *Superior color reproduction*
- *Excellent contrast*
- *Unique antiglare finish on ¼" acrylic substrate*
- *1.0 gain across a 180° viewing cone*
- *Sizes through 120" diagonal*
- *Ideal for SXGA or UXGA displays; ready for the next generation of higher resolution projectors*

Installation

When framing a single screen, select Draper's System 100, 200 or 400 framing systems. See details on page 47. For multiple screens or VideoWall applications, our Zero Edge, Clear Lexan or System 200 VideoWall Framing Systems are compatible.

Dimensions & Data—IRUS

Nominal Diagonal	Viewing Area	Overall Size	Net Wt. (lbs.)
NTSC Video Format (3:4)			
60"	36" x 48"	37" x 49"	19
67"	40¼" x 53⅜"	41¼" x 54⅜"	24
72"	43¼" x 57⅜"	44¼" x 58⅜"	27
84"	50½" x 67¼"	51½" x 68¼"	37
90"	54" x 72"	55" x 73"	43
96"	57⅜" x 76⅞"	58⅜" x 77⅞"	49
100"	60" x 80"	61" x 81"	53
120"	72" x 96"	73" x 97"	76

Specifications—IRUS

_____Draper IRUS-Infinite Resolution Uniformity Screen, size _____ (up to 73" x 97"). Material to be acrylic, one-piece, with unique antiglare finish. Must be compatible with single lens projection technology, and guaranteed not to dual image, ghost or moiré. Screen to have uniform center-to-corner brightness, superior color reproduction, excellent contrast, 1.0 gain, 180° viewing cone. Screen to be capable of handling high resolution up to 1200 x 1600.

Options: Single screen to be furnished with factory installed anodized aluminum frame, System (100/200), in (clear/black) finish, or System 400, in black finish. For multiple screens or VideoWall applications, specify Draper's Zero Edge, Clear Lexan® or System 200 VideoWall Framing Systems.

Note to Specifiers: Be sure to specify overall screen size as well as opening size. Draper cannot recommend field cutting or alteration.

For complete submittals, instructions and specifications, visit Draper's website at www.draperinc.com.

Vortex

Combining the Best of Optical and Diffusion Rear Screen Technology

The Vortex is a marriage of the best features of two rear screen technologies—optical and diffusion.

A 0.5 mm Fresnel lens gathers the light from the projector and directs it at a right angle through the screen. As the light exits screen on audience side, a diffusion medium redistributes the light evenly in all directions—up, down, left, right and center. The result is an extraordinary projected image with—

- *Superior resolution and color contrast*
- *Wide viewing cone in both the horizontal and vertical axes*
- *Extraordinary center-to-corner brightness ratio*
- *Uniform brightness without hot spots*

The unique features of the Vortex provide important advantages and benefits—

- *The Vortex is designed for use with single lens projectors*
- *Projected light is collimated, then diffused evenly, making the Vortex well suited for use in videowalls and rooms with tiered seating*
- *Charcoal grey tint provides superior color contrast even under harsh ambient light*
- *The diffusion medium is in the acrylic, so the diffusion medium can't be scratched or damaged*

Installation

When framing a single screen, select Draper's System 100, 200 or 400 framing systems. See details on page 47. For multiple screens or VideoWall applications, our Zero Edge, Clear Lexan or System 200 VideoWall Framing Systems are compatible.

Dimensions & Data—Vortex

Nominal Diagonal	Image Size	Overall Size	Net Wt. (lbs.)
NTSC Video Format (3:4)			
60″	36″ x 48″	37″ x 49″	16
67″	40¼″ x 53⅜″	41¼″ x 54⅜″	18
72″	43¼″ x 57⅜″	44¼″ x 58⅜″	20
84″	50½″ x 67¼″	51½″ x 68¼″	27
90″	54″ x 72″	55″ x 73″	31
96″	57⅜″ x 76⅞″	58⅜″ x 77⅞″	44
100″	60″ x 80″	61″ x 81″	46
120″	72″ x 96″	73″ x 97″	66
125″	74¾″ x 99¾″	75¾″ x 100¾″	71
140″	85⅜″ x 113⅜″	86⅜″ x 114⅜″	128
150″	91⅜″ x 121⅜″	92⅜″ x 122⅜″	146
160″	97⅜″ x 129⅜″	98⅜″ x 130⅜″	165

Specifications—Vortex

_____ Rear projection screens to be Draper Vortex, size _____. Material to be cast acrylic, one-piece, not to exceed ⅜″ in thickness. Rear (projector) side of screen to be an ultra-fine Fresnel lens, pitch 0.5 mm or 0.8 mm, serving to refract projected light directly toward audience and to provide maximum light distribution over a horizontal plane of up to 180°. Light diffusion agents shall feature a dark tint to enhance color contrast, and shall also control vertical and horizontal light distribution. Front lenses of screen shall be treated with a special anti-reflectance coating, which shall control glare without interfering with the projected image. Screen gain to be 2.0 on axis. Horizontal half-gain angle to be 25° from projection axis. Vertical half-gain angle to be 25° from projection axis.

Options: Screen shall be furnished with factory installed anodized aluminum Cineframe® in (System 100/System 200) style and (black/clear anodized) finish, or System 400 in black finish.

Custom sizes or screens larger than those listed may be available. Contact Draper, Inc. for details.

DiamondScreen™

Designed for Video and Data Projection

DiamondScreen—the first rear projection screen designed specifically for video and data projection. The DiamondScreen derives its incredible optical performance from its patented Fresnel/lenticular lens system. Its amazing uniformity and brightness allows you to turn the brightness down on your projector to save lamp life.

The DiamondScreen offers—

- *The world's most sophisticated, efficient rear projection screen*
- *A panoramic 180° horizontal viewing cone, and the largest vertical viewing cone of any product of its type*
- *High Contrast Grey optical tint, for superior color contrast*
- *Anti-reflective properties for superior performance even under conditions of high ambient light*
- *Superior corner-to-center brightness ratio, with no "hot spots"*
- *3.5 gain on axis*
- *The widest range of sizes—and the largest sizes—in the industry*

DiamondScreen is available in any custom size up to a maximum overall size of 120″ x 160″.

HoloView

Transparent Rear Screen

You've never seen an image like this before

The HoloView rear screen stops prospective customers in their tracks. Grab the spotlight at trade shows, in showrooms, shopping malls and any retail environment. Cast a dramatic visual image in museums, banks, entertainment venues—anywhere you need to catch your audience's eye.

A HoloView screen consists of transparent ¼″ acrylic. See a clear image—*and* see through the screen—at the same time.

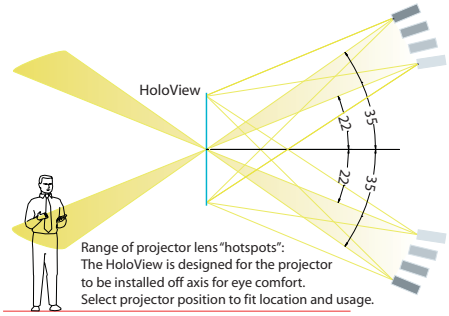
For the most dramatic visual images, the HoloView should be suspended from wires or cables so the projected image appears to float in space. Aluminum grip strips are provided at top and bottom for this purpose. Compatible with any single lens projector with digital keystone correction. Projector can be placed above or below the plane of the screen. HoloView rejects incident light, so you don't have to enclose the projection area—you can even hang this screen in a store window!

Large Sizes

The HoloView is available in sizes through 120″ diagonal. All sizes are single element, without seams or visible lens pattern. The sharpest, clearest and most accurate see-through image you'll find.

System Options

- ***Aluminum grip strips***—Standard at top and bottom for free-hanging installation. Also available on left and right, or with in-wall Cineframe (see page 47).
- ***Standard screen orientation***—Horizontal (landscape). May also be hung vertically (portrait position).



Dimensions & Data—DiamondScreen

Nominal Diagonal	Viewing Area	Overall Size	Net Wt. (lbs.)
NTSC Video Format (3:4)			
60″	36″ x 48″	37″ x 49″	19
67″	40¼″ x 53⅜″	41¼″ x 54⅝″	24
72″	43¼″ x 57⅜″	44¼″ x 58⅝″	27
84″	50½″ x 67¼″	51½″ x 68¼″	37
90″	54″ x 72″	55″ x 73″	43
96″	57⅜″ x 76⅞″	58⅝″ x 77⅞″	49
100″	60″ x 80″	61″ x 81″	53
120″	72″ x 96″	73″ x 97″	76
125″	74¾″ x 99¾″	75¾″ x 100¾″	79
*140″	85⅜″ x 113⅜″	86⅜″ x 114⅜″[1]	103
*150″	91⅜″ x 121⅜″	92⅜″ x 122⅜″[1]	118
*160″	97⅜″ x 129⅜″	98⅜″ x 130⅜″[1]	134
*170″	101¾″ x 135¾″	103¼″ x 137¼″[2]	148
*180″	107¾″ x 143¾″	109¼″ x 145¼″[2]	165
*190″	113¾″ x 151¾″	115¼″ x 153¼″[2]	184
*200″	118½″ x 158½″	120″ x 160″[2]	200

* Factory frame required.
[1] These sizes require factory installed System 200 frame.
[2] These sizes require Large Screen System Frame (not factory installed).

Dimensions & Data—HoloView

Nominal Diagonal	Viewing Area[1]	Overall Size[2]	Net Wt. (lbs.)
NTSC Video Format (3:4)			
40″	22″ x 33¾″	23⅝″ x 33¾″	9
46″	24⅜″ x 38⅝″	27¾″ x 38⅝″	10
50″	26⅞″ x 42⅜″	30″ x 42⅜″	11
60″	33″ x 50⅜″	36¼″ x 50⅜″	15
67″	37⅜″ x 55⅛″	40½″ x 55⅛″	19
72″	40″ x 60″	43¼″ x 60″	21
84″	47¼″ x 69¾″	50⅜″ x 69¾″	29
90″[3]	50⅞″ x 74⅜″	54″ x 74⅜″	33
96″[3]	53½″ x 80″	56¾″ x 80″	37
100″[3]	55⅛″ x 84¼″	58¼″ x 84¼″	41
110″[3]	60½″ x 92⅝″	63¾″ x 92⅝″	45
120″[3]	65⅞″ x 100⅞″	69⅛″ x 100⅞″	49

[1] With aluminum grip strips at top and bottom of screen. Grip strips also available on left and right sides through 84″ diagonal.
[2] Aluminum grip strips will add ⅛″ to relevant dimension.
[3] Large Screen Mounting Frame at top of screen; grip strip at bottom. Draper recommends framing 90″ diagonal screens and larger to prevent bowing.

Specifications—HoloView

_____Draper HoloView rear projection screens, size _____, ¼" thickness, with mounting holes and anodized aluminum grip strips standardly provided at top and bottom (optional: on right and left sides). Screen shall be provided with universal and adjustable hanging feature, including 16-gauge nylon-coated steel cable, with tensile strength 330 lbs. and break point of 1500 lbs., allowing easy installation with standard tools.

One-piece acrylic material to be 64% transparent, to allow for look-through ability. Screen gain shall be 4.0. Screen shall be compatible with all single-lens projectors with digital keystone correction. Optical medium in matrix shall accept projected light at any angle up to 36° perpendicular. HoloView shall have horizontal half-gain angle of 28° and a vertical half gain angle of 22°. Patent pending.

Specifications—DiamondScreen

_____ Rear projection screens to be Draper DiamondScreen, size _____. Material to be cast acrylic, one-piece, not to exceed ¼″ in thickness, with special patented lens design. Rear (projector) side of screen to be a Fresnel lens, pitch 0.11mm, serving to refract projected light directly toward audience. Light diffusion agents permanently embedded in screen matrix to be tinted with Draper High Contrast tint to enhance color contrast. Diffusion agents shall also control vertical light distribution. Front (audience) side to be an ultra-fine linear lens, providing maximum light distribution over a horizontal plane of 180°. Front lenses of screen to be treated with a special anti-reflectance coating, which shall control glare without interfering with the projected image. Screen gain to be 3.5 ± 0.3 on axis. Horizontal half gain angle to be not less than 32° from projection axis. Vertical half gain angle to be ±10° from projection axis. Entire screen shall be UL94HB flame class approved.

Options: Factory installed anodized aluminum Cineframe in (System 100/200) style and (black/clear anodized) finish or in System 400 in black finish. (Screens 140″ through 160″ diagonal require System 200 or 400 factory-installed frame to facilitate safe handling. Screens 170″ diagonal and larger require Large Screen System Frame, not factory installed).

Cinescreen® Rigid Rear Screens

Only from Draper

Draper Cinescreens differ from any other rigid rear projection screens in two *extremely important* respects:

• Cinescreen optical coatings have been formulated to provide *inherent* abrasion resistance. No other manufacturer offers you this protection.

• Only Draper offers you a choice of six different optical coatings, each of which is available in your choice of three unique optical tints. With a Draper Cinescreen, you can select the optimum combination of optical coating and tint based upon your projection equipment, audience seating pattern, desired contrast level, screen aspect ratio, ambient light level and aesthetic considerations. Only Draper offers you this versatility. If you need assistance in determining the ideal optical coating and tint for your particular requirement, contact Draper or your local Draper dealer.

Planning Checklist

When specifying or ordering a Cinescreen, we need to know:

- Dimensions
- Substrate and thickness
- Optical coating and tint
- ArmorKote® or NonGlare, if required
- Factory-installed framing—system number and finish, if required

Substrates

Draper uses the finest plate glass and clear acrylic as Cinescreen substrates. Optical qualities are very similar: today's acrylics have been improved and exhibit slightly better transmission than plate glass. Here are some other distinguishing characteristics:

- ***Cineglass***®—Recommended for maximum sound isolation, scratch resistance, service life and lays flatter. Weighs approximately twice as much as acrylic, breaks more easily, must be installed by a glazier. Glass recommended for use with multiple projectors.
- ***Cineplex***®—Lightweight, durable and break resistant. Easier to install. Requires more care in cleaning, as acrylic scratches more easily than glass. Less soundproof than glass.

	Cineglass			Cineplex		
Thickness	¼″	⅜″	½″	¼″	⅜″	½″
Max. Size*	6′ x 8′	10′ x 17′	10′ x 17′	100″ x 150″	9′ x 20′	9′ x 20′
Weight/sq. ft. (lbs.)						
Net	3.5	5	7	1.5	2.5	3.5
Shipping	8.5	10.5	12.5	6.5	7.5	8.5

*Larger sizes available on request. Contact Draper for details.

Ten-Year Warranty

All Draper Cinescreens are covered by a limited 10-year warranty against defects in materials and workmanship. Complete warranty terms will be furnished upon request.

Optical Coatings

Cinescreens may be furnished with your choice of six optical coatings:

- ***Cine 10***—Ultra-wide angle coating for maximum center-to-corner uniformity of projected image: gain 1.0. Suitable for high output projectors.
- ***Cine 13***—Gain of 1.3, with extremely broad viewing cone and uniform distribution of projected light. Use with all projection formats, including higher-luminance video and data-graphics projection.
- ***Cine 15***—Benchmark wide-angle coating. Gain of 1.5, with uniform distribution of projected light. For all formats, including higher-luminance video projectors.
- ***Cine 18***—For medium to wide-angle viewing, with on-axis gain of 1.8. Suitable for all projection formats, including video.
- ***Cine 20***—Peak gain 2.0, with a somewhat broader viewing cone than Cine 25. Suitable for relatively high ambient light conditions. For all projection formats, including data, graphics, and video.
- ***Cine 25***—Suitable for narrow viewing cones and lower output projectors. On-axis gain 2.5. Good image resolution and color reproduction.

Optical Tints

The optical tint is an important modifier of the optical coating. Tint influences image contrast and color value. All six Draper optical coatings are available in 3 optical tints (NG, HC, W), to allow the specifier to select the optimum combination of brightness, viewing angle, and contrast level for the planned installation.

HC—High Contrast (e.g. Cine 13HC)—Dark grey tint. Exceptional contrast and color rendition. Excellent light dispersion properties. Enhances legibility of computer generated data displays with light or bright text against a dark background: dark colors and black are reproduced with remarkable accuracy. HC tint performs equally well with static and moving displays.

NG—Neutral Grey (e.g. Cine 13NG)—Standard formulation. Medium grey tint. Normal contrast levels and good color rendition. Brightness levels are uniform throughout entire viewing cone. Suitable for all projection formats and images. Most commonly used when installation requires equal use of data/video/graphics.

W—White (e.g. Cine 13W)—Neutral white tint. Low contrast levels excellent for home theatres with controlled lighting and calibrating color balance. Enhances the rear screen's ability to reflect a laser pointer beam. Not recommended for computer graphic/data displays. Requires lower ambient light level in audience area.

Be sure to specify NG, HC or W along with the required optical and protective coatings.

Special Coatings

Draper offers optional protective and anti-reflectance coatings for your delicate rear screen:

ArmorKote®—While Draper's optical coatings are inherently abrasion resistant, you can further insure your Cinescreen against damage by adding ArmorKote treatment. A breakthrough in rear screen protection. Highly resistant to solvents, abrasion and normal impacts of fingernails, pointers, pencils and pens. While ArmorKote will be damaged by repeated or willful abuse through impacts of sharp objects, use as a writing surface, etc., it is an excellent "insurance policy" against accident and error. Virtually impervious to grease, oil and ammonia; very resistant to most solvents, even permanent markers and chalk. ArmorKote is invisible and does not affect image quality. It is by far the toughest rear screen protective coating available.

NonGlare—Applied to the front or viewing side of the screen for anti-reflection properties. Slightly diminishes resolution.

Installation

Draper Cinescreens may be framed at the job site or shipped with a factory-installed Cineframe (detailed below). Cinescreens are usually installed with the coated side facing the audience. The coated side may be installed toward the projector when there are concerns about abuse, with only a slight reduction in image quality.

Specifications—Cinescreen®

Cineglass_____Rear projection screens to be Draper Cinescreen, optical coating _____, tint ____, thickness (¼″, ⅜″, ½″). Base of select quality plate or float glass, with an optical coating not to exceed .004″, permanently bonded to one side and inherently abrasion resistant.

Cineplex_____Rear projection screens to be Draper Cinescreen, optical coating ____, optical tint____, thickness (¼″, ⅜″, ½″). Base of select quality clear acrylic, with an optical coating not to exceed .004″, permanently bonded to one side and inherently abrasion resistant. Cineplex screens with System 200 or System 300 Cineframe meet ASTM D702 and B221 test specifications.

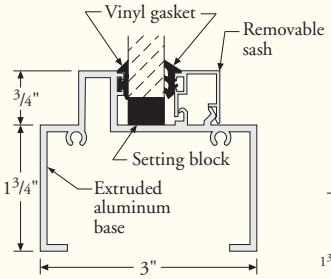
All Units—Overall panel size 1/16″ from exact overall size specified. Substitute materials submitted and approved prior to bid date. Cinescreen to be mounted with the optically coated side toward the (projector/audience) area.

Options—Screen to be furnished with ArmorKote abrasion- and solvent-resistant coating over the optical coating. Screen to be furnished with factory installed anodized aluminum frame, System (100/200/300) in (clear/black) finish or System 400 in black finish.

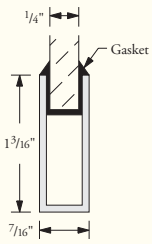
Note to Specifiers—Be sure to specify overall screen size as well as opening size. Draper cannot recommend field cutting or alteration.

Cineframe® For Draper Rear Screens

Rigid rear screen installation costs and problems are virtually eliminated with factory-installed Cineframes. Simply place the screen in the finished wall opening, shim into position and trim as desired. Four styles available. All are extruded of 6063-t5 alloy anodized aluminum.



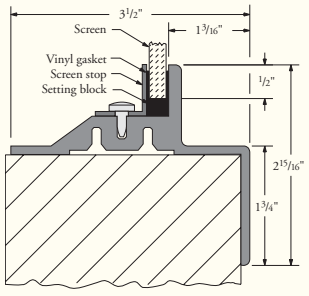
System 300 and 200



System 100

System 400

System 400 simplifies your installation. Cut a rough opening ¼″ larger than the overall frame size, slide the screen in and bolt into place. No finish carpentry required. System 400 has a 1¾″ wide dress trim that hides the opening. The audience only sees an attractive frame around a rear screen. Suitable for Cineplex in sizes through 9′ x 12′ in ⅜″ thickness, ¼″ Cineplex in all sizes, IRUS, Vortex and DiamondScreen in all sizes, and ¼″ and ⅜″ Cineglass in sizes through 91″ x 121″. Black finish.



System 400

System 300

Adds 4¼″ to overall size of screen; reduces clear viewing area by 1″ in each dimension. Suitable for any Cinescreen ⅜″ or ½″ thick. Black or clear anodized finish.

System 200

Same sturdy design as the System 300, extruded to a slightly thinner wall. Suitable for ¼″ and ⅜″ Cineglass in sizes through 8′ x 10′, ¼″ and ⅜″ Cineplex in all sizes, IRUS and Vortex in all sizes, and DiamondScreen through 160″ diagonal. Black or clear anodized finish.

System 100

Simple, clean frame for smaller rear screens. Adds 1¾″ to overall height and width of screen; reduces viewing area by ⅞″ in each dimension. Suitable for ¼″ Cineglass in sizes through 4′ x 5′, ¼″ Cineplex and DiamondScreen in sizes through 100″ diagonal, and IRUS and Vortex in sizes through 120″ diagonal. Black or clear anodized finish.

Draper Adjustable RPS– Rear Projection System

Takes the guesswork out of rear screen system design

Draper designed the Adjustable Rear Projection System to provide perfect rear screen picture quality, while saving valuable floor space. The Adjustable RPS folds the light from a video, data-graphics, LCD, DLP, CRT, digital or slide projector using the finest optical quality, first surface glass mirror.

The Adjustable RPS consists of a custom designed projector cradle, first surface glass mirror, and a unitized tubular steel support structure to position the projector and mirror in precisely the right relationship to each other and to the rear screen.

The projector cradle is customized for your projector, and allows for *both tilt-axis adjustment and micro-fine height adjustment—without tools—to position the image* on the rear screen.

The real beauty of the Adjustable RPS is that it is built specifically for your unique requirement. You provide us with the make and model of projector, desired screen size, and a few simple room dimensions. Our designers evaluate the optics and determine the proper light path geometry. The Adjustable RPS is preset for a perfect fit. If the room dimensions or projector specifications change, the Adjustable RPS can now be adjusted in the field to fit. Mirror height, projector height, mirror angle, and projector position (front to back) are all adjustable.

The Adjustable RPS ships complete with all required fasteners and hand tools.

Adjustable RPS System Components

Supporting frame is constructed of 1″ x 2″ x 11–14 ga. rectangular welded steel tubing, with black epoxy powdercoat finish. It is sized to fit perfectly in your projection room, based upon dimensions you furnish.

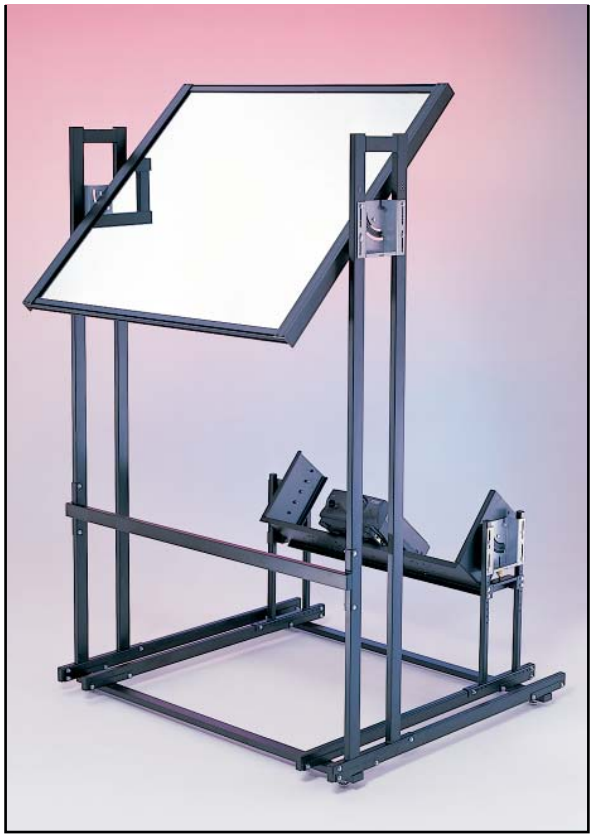
Sled Base features heavy-duty leveling feet and pre-drilled anchor points: when the system is correctly set, it may be permanently fastened in place.

Pivot plates are pre-drilled for the proper angle of installation, *and* calibrated in degrees for quick, precise adjustments if required. Cradle pivot plate features micro-fine finger-operated height and tilt adjusters. Mirror plate features shoulder bolts to simplify installation and slots for height adjustment.

Projector cradle is custom-fitted to your projector. It is positioned on the frame in exactly the proper location for correct geometry. Pre-drilled adjustment holes allow for changes in room configuration. Cradle formed of 11–ga. steel, finished in black epoxy powdercoat and pre-drilled for your projector.

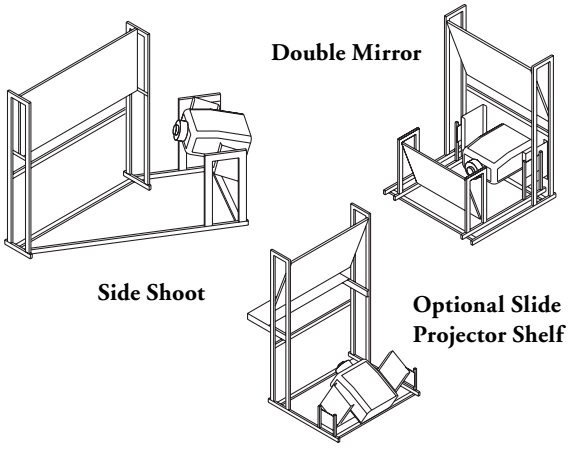
Glass, first surface mirror is 94% reflective, box framed in black anodized aluminum. Sized and positioned to reflect a perfect image on the rear projection screen. Height and angle may be adjusted when needed.

Complete specifications for all models of RPS on page 51.



The unit pictured above illustrates the standard RPS configuration. The drawings below represent some possible alternatives.

Custom Designed for Your Requirements



Mirror Manager

No more lost pixels.

You may know how tough it can be to make those final tweaks so the projector will put a perfectly square image on the rear projection screen. Lining up all the images in a control center videowall may be the work of several days. Mirror Manager is Draper's innovative solution to that problem.

The Mirror Manager may be used as part of a Draper Rear Projection System, Retro, MultiScreen System or anywhere a Draper first surface mirror is installed. With Mirror Manager, the final image adjustments are quick and easy. After you have adjusted all the larger controls: the projector, its platform, and mirror position…then Mirror Manager goes to work. Using its hand-operated knobs, you can quickly fine-tune the image to eliminate pincushioning, barrel distortion and just to square up the corners. The mirror remains securely mounted in a black anodized extruded aluminum frame.

Mirror Manager saves installation time and money—and improves the image—by actually bending the mirror in tiny, highly controlled increments. Use eight knobs around the perimeter to make the precise adjustment you need. Mirror Manager should be used only for those minor tweaks that look so easy and take so long without it.

RPS/Complete

The Draper RPS/Complete has all the features of an Adjustable RPS *plus* a framed rear screen attached to the structural uprights. Choice of an IRUS, Vortex, Cinescreen or DiamondScreen in a System 400 frame attached to the RPS for a perfectly aligned system. Screen sizes through 6′ high x 8′ wide. The advantages of an RPS/Complete are staggering:

- Framed screen "floats" in your wall opening. The wall does not bear the weight of the screen, so no finishing or reinforcement of the opening is required. Cut a rough opening, and set up the system.
- Since the wall's expansion/contraction properties do not put pressure on the screen, the result is a consistently flatter screen.
- Each element in the system is locked into its proper relationship, square with the others: screen-to-projector platform; projector platform-to-mirror; mirror-to-screen.
- Save installation time. Assemble the system, adjust the leveling feet on the base of the RPS, and the entire system is level.
- Since the screen is automatically square with the mirror, installation of projector and alignment of image is made easier.

RPS/Precision

The Draper RPS/Precision offers the world's most precise image alignment capabilities in a custom-built rear projection system. Why is that so important?

Today's digital projectors often allow little or no electronic image position adjustment. Therefore, precise physical positioning of the projector becomes critical in aligning and edge matching side-by-side images, and even in precisely locating a single projected image.

With incredible accuracy, the fine tuning capabilities of the Draper RPS/Precision Alignment Platform give you isolated adjustment of each individual projector in all six axes: height, front-to-back position, side-to-side position, pitch, roll and yaw.

Draper's unique Alignment Platform will allow single lens projectors, which have no internal or electronic adjustments, to adjust horizontal keystone, image size, image shift and image rotation.

Draper's Alignment Platform is also available in a lightweight version for today's smaller projectors.

Alignment Platform

Front-to-back adjustment knob
Yaw adjustment knob
Side-to-side adjustment knob
Roll adjustment knob
Cradle pivots on pivot plate for pitch adjustment

The RPS/Precision with Alignment Platform can be adjusted in all six axes. Also available with Projector Support Structure and MultiScreen Stystem.

Custom Information Display Systems products

Draper specializes in custom rear screen products and configurations for simulation applications, virtual reality systems, point-of-purchase displays, command and control centers, network operation centers, conference rooms, board rooms, training rooms, commercial simulation, product and process design, sports and gaming venues, broadcast and teleconferencing.

Contact your Draper dealer for details.

Custom VideoWall Framing Systems

Essential to our superior VideoWall design

Multiple rear screen VideoWalls are used in command and control rooms, network operations centers, sports and gaming venues, point of purchase advertising and the entertainment industry. Since 1985, Draper has developed a particular expertise in the design and manufacture of custom rear screen VideoWalls and related products for electronic information display. With installations in more that 70 countries, Draper is the acknowledged world leader in the most demanding area of the projection screen industry.

With more unique types of rear projection screens, videowall framing systems, and projector mounting systems, and more combined years of design experience than any other projection screen manufacturer, Draper's highly skilled engineers can provide an optimum solution for any information display requirement. Both technological and human factors are always carefully considered. All proposals are supported by CAD-generated dimensional drawings.

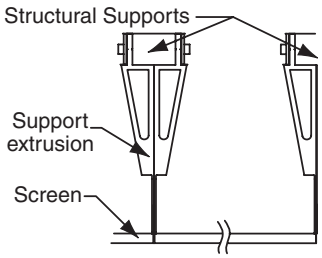
The IRUS, Vortex, Cineplex and DiamondScreen may be used in a VideoWall, with individual screen sizes from 30″ diagonal through 180″ diagonal. Draper offers three VideoWall framing systems.

Caltrans, Irvine, CA.—Transportation Management Center. Installed by MCSi. A 3 x 3 MultiScreen System of IRUS screens in Zero Edge frames. Includes custom monitor arrays. System 200 Framing System—U.S. Patent No. 5,103,339. Zero Edge Framing System—U.S. Patent No. 6,000,668.

Zero Edge Framing System

Draper's mullionless Zero Edge Framing System is the first and only optically seamless large screen videowall framing system. Zero Edge incorporates a proprietary screen attachment system supported by extruded aluminum light baffles on all four sides. Screens are assembled with "zero" separation. Actual screen separation is approximately .5 mm.

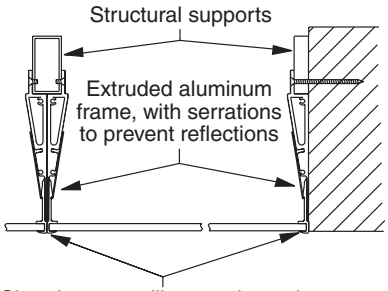
Zero Edge VideoWall modules may be installed in-wall or can be incorporated in a freestanding Draper MultiScreen System. Panoramic or tilted VideoWalls are possible in any configuration. Individual modules are completely self-supporting, reducing the possibility of screen warpage. Patented.



Zero-Edge videowall frame

Close Edge Clear Lexan® Framing System

Individually framed screen modules with a "close-edge" transparent Lexan perimeter support frame, for a near-seamless appearance. Actual screen separation is approximately 4 mm. Screen modules include an extruded aluminum light baffle on all four sides. These modules are assembled within an existing rough opening. Panoramic or tilted VideoWalls are possible with Clear Lexan frames.

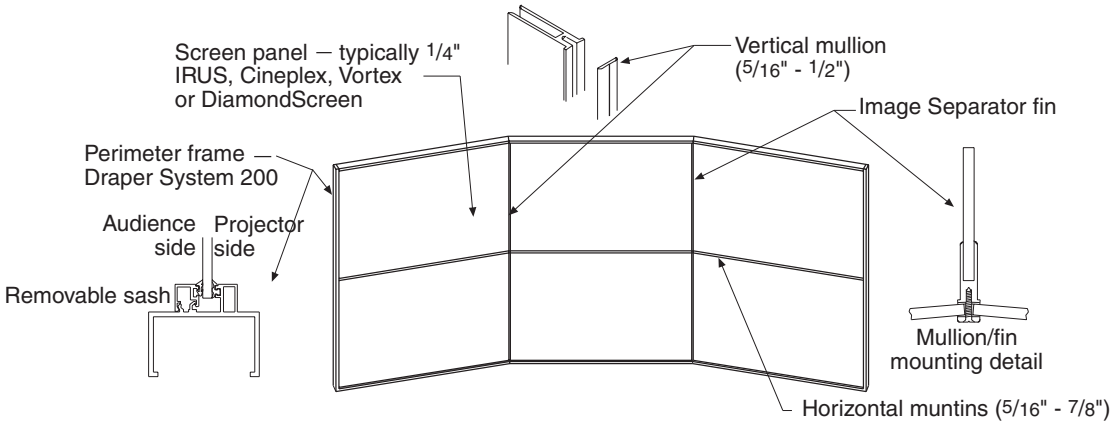


Clear Lexan mullions and muntins support screens with minimum separation

System 200 VideoWall Framing System

Offers maximum flexibility of design and structural integrity while accommodating rear screens of any size. Completely unitized for perfectly uniform contiguous images regardless of the number of screens or tiers in the array. The manufacturing and assembly of complex panorama radius VideoWalls is executed with precision and unparalleled structural integrity.

A patented two-piece image separator system, consisting of vertical mullions and horizontal muntins, enables removal of individual screens within the videowall without disturbing the rest of the system. Light separating baffles eliminate overscan between adjacent projected images. Patented.


Screen panel — typically 1/4" IRUS, Cineplex, Vortex or DiamondScreen
Vertical mullion (5/16" - 1/2")
Image Separator fin
Perimeter frame — Draper System 200
Audience side
Projector side
Removable sash
Mullion/fin mounting detail
Horizontal muntins (5/16" - 7/8")

Specifications—VideoWall

Rear Projection Screens

_____Rear projection screens to be (IRUS/Vortex/Cineplex/DiamondScreen), quantity_____, image dimension:_____diagonal,_____high x_____wide (not to exceed 100″ diagonal (125″ diagonal if Close Edge Framing System). Material to be acrylic, not to exceed ⅜″ thickness (¼″ thickness if Close Edge Framing System or System 200 VideoWall Frame). (**Note:** If Cineplex, also specify optical coating and optical tint).

Multiple rear screen framing system to be Draper's (Zero Edge VideoWall Frame/ Close Edge Framing System/System 200 VideoWall Frame), sized and manufactured to conform with the project's dimensional specifications. Linear dimensions of frame system components should be accurate to the nearest 1/64″. The entire VideoWall screen and frame assembly, isolated from any load bearing, must be self-supporting within the rough opening, with its entire weight supported by the lower frame members on the screen support sill or knee wall. The VideoWall's perimeter frame will be secured to an appropriate substrate along the top, sides and bottom of the finished opening.

Zero Edge VideoWall Framing System

Integral vertical members of structural steel must support the screen assembly. To avoid warpage the weight of upper screens must be supported by the horizontal and vertical frame members and not the lower screens, i.e., an upper screen may safely remain in place when the screen immediately below is removed. Vertical and horizontal screen edges to align and butt on all edges. Extrusion to be of 6063-T5 aluminum, black anodized, engineered to eliminate light reflection into the projection surface. This extrusion shall be attached to structural steel frame by means of metal screws. The aluminum extrusion and structural frame will serve as image separator baffles, eliminating all over scan between adjacent images. All components to be coded for field assembly. Patented by Draper, Inc. (U.S. Patent No. 6,000,668).

Close Edge VideoWall Framing System

Integral vertical members of structural steel must support the screen assembly. To avoid warpage the weight of upper screens must be supported by the horizontal and vertical frame members and not the lower screens, i.e., an upper screen may safely remain in place when the screen immediately below is removed. Vertical and horizontal screen separation must not exceed ⅛″ in width, with transparent polycarbonate (Lexan) grip not to exceed ¼″ wide. The Lexan grip elements shall be attached to a bayonet-shaped extrusion by means of a spring steel retainer. Extrusion to be of 6063-T5 aluminum, black anodized, engineered to eliminate light reflection into the projection surface. This extrusion shall be attached to structural steel frame by means of metal screws. The perimeter frame system shall be only 1/16″ thick at edge of screens, with ¼″ Lexan grip. The aluminum extrusion and structural frame will serve as image separator baffles, eliminating all overscan between adjacent images.

System 200 VideoWall Framing System

Integral vertical members must support the screen assembly. To avoid warpage the weight of the upper row of screens must be supported by the horizontal and vertical frame members and not the lower screens, i.e., an upper screen may safely remain in place when the screen immediately below is removed. The vertical screen separator mullions must not exceed 5/16″–½″ in width, depending on size and configuration. The horizontal screen separator muntin width must not exceed 5/16″–⅞″ in width, depending on size and configuration. Vinyl or rubber gaskets are to be provided on bearing surfaces of the vertical and horizontal separator frames, as well as along channels within the perimeter frame to eliminate any contact between the screen substrate and the extruded aluminum frame components.

The perimeter frame system will add 4¼″ in height and width to the overall screen and mullion assembly. The perimeter frame must grip (obscure) no more than ½″ of the screen's viewing area. The perimeter frame will be equipped with a removable sash on the viewing side to permit the removal and installation of the screen panels from the front. The perimeter frame's rear sash will be permanently affixed to maximize support.

The vertical mullions and horizontal muntin separator frames will be of a two-piece design, equipped with a removable cap to permit the removal and installation of individual screen panels from the front if needed. Horizontal and vertical image separator baffles must be provided behind the vertical mullions and horizontal muntins, eliminating all overscan between adjacent images.

The entire VideoWall frame system assembly, including the perimeter frame, vertical mullions, horizontal muntins, and image separator baffles must be anodized in a matt or low gloss black to eliminate reflectivity and provide a serviceable and easily maintained finish. All components to be coded for field assembly. Patented by Draper, Inc. (U.S. Patent No. 5,103,339).

Specifications—Adjustable RPS

_____ Adjustable Rear Projection System (RPS), to be designed, engineered and custom fabricated for each specific application. To provide precise dimensional relationship between projector, first surface mirror(s), and rear projection screen. System to include:

- Rear projection screen to be Draper (IRUS/Cinescreen/Vortex/DiamondScreen) size ____ diagonal, with factory-installed aluminum frame with (black/clear) anodized finish.
- First surface optical grade glass mirror, 94% reflective. Mirror shall be fully framed in anodized aluminum perimeter frame specially designed for the purpose to eliminate warpage and isolate mirror from any load bearing. Extrusion frame includes gasket materials to eliminate frame to mirror contact and allow for thermal expansion and contraction. Mirror perimeter frame factory drilled to mount to RPS mirror support stand per custom specifications.
- Projector mounting cradle, with custom adapter brackets and mounting hardware for each specific projector, with machined aluminum pivot plate for image height adjustment. Cradle and pivot plate equipped with special alignment hole to position projector in predetermined factory recommended tilt position during installation. Projector cradle and adapter brackets designed especially for use with individual projector, type (projector make and model)_____.
- Rear Projection Systems' complete unitized framework to be 1″ x 2″ x 11-14 gauge rectangular welded tubular steel. Framework custom built to support mirror and projector mounting assembly in precise predetermined factory position required for successful rear screen projection.
- Steel sled base to incorporate heavy duty leveling feet in weld nuts and predrilled anchor points at all four corners. Framework, projector cradle and projector adapter brackets to be finished in black epoxy powdercoat for corrosion resistance and anti-reflectance.

Entire system to be field assembled following simple step-by-step instructions. Unit to be furnished complete with all required fasteners and hand tools for assembly.

Specifications—RPS/Complete

Add to Adjustable RPS specifications above: plus a framed Draper rear projection screen structurally attached to the unitized framework for perfect alignment.

- Rear projection screen to be Draper (IRUS/Cinescreen/Vortex/DiamondScreen) size_____diagonal (through 6′h x 8′w), with factory-installed System 400 black aluminum frame.

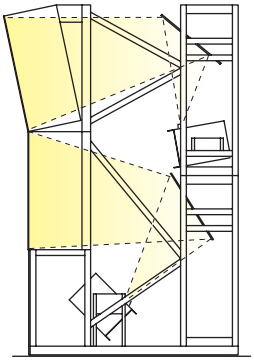
Specifications—RPS/Precision

_____ Rear Projection System/Precision (RPS/Precision), to be designed, engineered and custom fabricated for each specific application. To provide precise dimensional relationship between projector, first surface mirror(s), and rear projection screen. System to include:

- Rear projection screen to be Draper (IRUS/Cinescreen/Vortex/DiamondScreen) size ____ diagonal, with factory-installed aluminum frame with (black/clear) anodized finish.
- First surface optical grade glass mirror, 94% reflective. Mirror shall be fully framed in anodized aluminum perimeter frame specially designed for the purpose to eliminate warpage and isolate mirror from any load bearing. Extrusion frame includes gasket materials to eliminate frame to mirror contact and allow for thermal expansion and contraction. Mirror perimeter frame factory drilled to mount to RPS mirror support stand per custom specifications.
- Projector mounting cradle, with custom adapter brackets and mounting hardware for each specific projector, with machined aluminum pivot plate for image height adjustment. Cradle and pivot plate equipped with special alignment hole to position projector in predetermined factory recommended tilt position during installation. Projector cradle and adapter brackets designed especially for use with individual projector, type (video/data/graphics projector make and model)_____.
- Alignment Platform, specifically designed for front-to-back, side-to-side, roll and yaw adjustments of single lens projectors.
- Rear Projection Systems' complete unitized framework to be 1″ x 2″ x 11-14 gauge rectangular welded tubular steel. Framework custom built to support mirror and projector mounting assembly in precise predetermined factory position required for successful rear screen projection.
- Steel sled base to incorporate heavy duty leveling feet in weld nuts and predrilled anchor points at all four corners. Framework, projector cradle and projector adapter brackets to be finished in black epoxy powder coat for corrosion resistance and anti-reflectance.

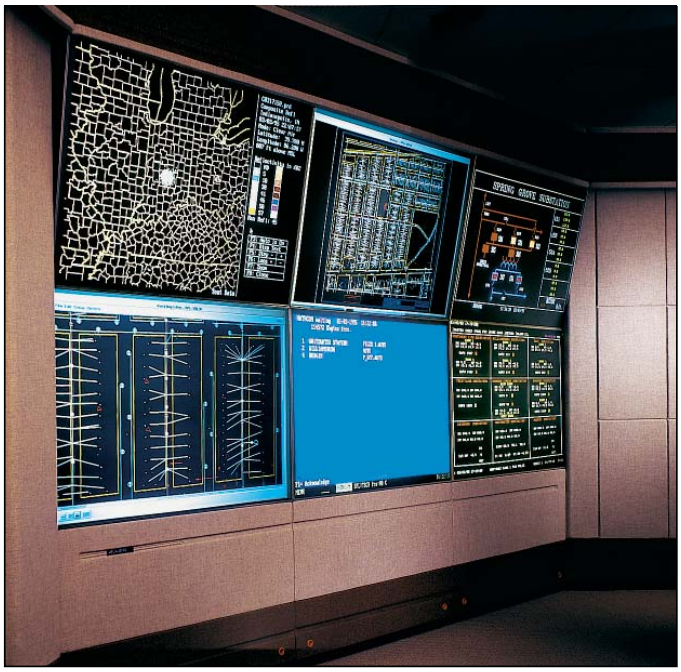
Entire system to be field assembled following simple step-by-step instructions. Unit to be furnished complete with all required fasteners and hand tools for assembly.

MultiScreen System



The Draper MultiScreen System is a unitized, self-supporting rear screen/projector cradle/first surface mirror system designed for control center and other VideoWall installations. Each unit consists of 2 or more rear screens, cradles and mirrors, all positioned in the exact required relationship to each other and to the audience. A convenient projector access panel is located at the bottom and is equipped for easy removal without tools.

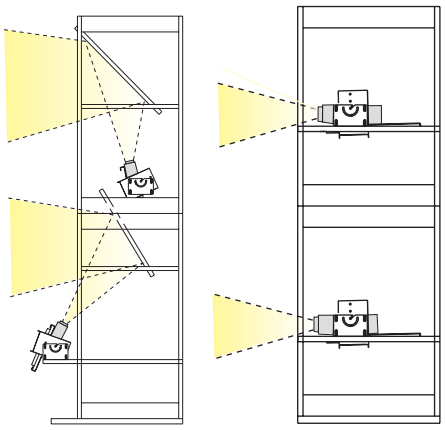
- Designed and custom built to your specific requirements
- Totally unitized and designed to conserve floor space
- Available 2, 3 or 4 screens high, with upper screens tilted as necessary for viewer comfort
- Alignment Platform available for precise positioning of projectors
- Choice of rigid rear screen: IRUS, Vortex, Cinescreens or DiamondScreens
- Choice of screen frames: Zero Edge (optically seamless) or transparent Clear Lexan®
- Screen sizes from 30″ through 135″ diagonal



Projector Support Structures

When building a custom VideoWall system, video and data graphics projectors must be safely and securely mounted at the proper focal distance from the screen. Draper offers sophisticated Projector Support Structures, designed and built to your specific requirement. Projectors will be positioned in the exact required relationship to a multiple screen VideoWall. Features:

- Custom-fitted projector cradles
- Machined aluminum pivot plates for quick alignment
- Unitized welded tubular steel framework
- Optional Alignment Platform for precise positioning of projectors
- Available in any grid configuration, in either straight throw or mirrored design
- Mirrors, if required, are 94% reflective optical grade first surface glass



A Word About Draper

Established in 1902 as a manufacturer of window shades for schools, Draper now offers four major product lines: projection screens and related audio-visual equipment (CSI section 11132); lifts and mounts for video projectors and plasma displays (CSI section 11457); window shades for commercial and institutional applications (CSI section 12492); gymnasium equipment, featuring the EZ Fold basketball backstop (CSI section 11480).

Draper has a 102-year tradition of product innovation. As you browse this catalog, watch for the logos at right to find new products and features.

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